

OFFICE OF THE CITY MANAGER

### COMMITTEE MEMORANDUM

TO: Neighborhood/Community Affairs Committee and Land Use Development

Committee

FROM: Kathie G. Brooks, Interim City Manager

DATE: March 19, 2013

SUBJECT: MEETING OF THE NEIGHBORHOOD/COMMUNITY AFFAIRS COMMITTEE (NCAC) AND

LAND USE DEVELOPMENT COMMITTEE (LUDC) ON TUESDAY, MARCH 19, 2013

A meeting of the Neighborhood/Community Affairs Committee and Land Use Development Committee has been scheduled for Tuesday, March 19, 2013 at 3:00pm in the City Manager's Large Conference Room, 4<sup>th</sup> Floor of City Hall.

The agenda for the meeting is as follows:

- 1. a) DISCUSSION REGARDING MIAMI BEACH MASS TRANSIT LOOP
  - b) DISCUSSION REGARDING TRANSIT ENHANCEMENTS FOR NORTH BEACH
- 2. MASS TRANSIT CONNECTIVITY
- 3. a) DISCUSSION REGARDING THE BIKE MASTER PLAN
  - b) DISCUSSION REGARDING THE COMPREHENSIVE BIKE MASTER PLAN
  - c) DISCUSSION REGARDING THE IMPACT OF BICYCLES INCLUDING THE DECO BIKE PROGRAM AND THE BIKE MASTER PLAN – AND OTHER VEHICLES, SUCH AS SEGWAYS AND SKATEBOARDS, ON SIDEWALKS AND PEDESTRIAN PATHS
  - d) DISCUSSION REGARDING UPDATING THE BIKEWAYS MASTER PLAN TO BETTER INTERACT WITH THE CITY'S TRAFFIC CALMING PLANNING
- 4. a) DISCUSSION REGARDING STATUS OF BEACH WALK FROM SUNRISE PLAZA TO 4<sup>TH</sup> STREET.
  - b) STATUS UPDATE FOR THE BEACH WALK FROM SUNRISE PLAZA TO FIFTH STREET.

c: Mayor and Members of the City Commission
Jose Smith, City Attorney
Duncan Ballantyne, Assistant City Manager
Jorge Gomez, Assistant City Manager
Max Sklar, Acting Assistant City Manager
Rafael E. Granado, City Clerk
Stephen Scott, Building Department Director
Hernan Cardeno, Code Compliance Division Commander
Alexis Denis, Procurement Director
Barbara Hawayek, Customer Service Manager
Carla Gomez, Special Projects Administrator

We are committed to providing excellent public service and salely to all who live, work, and play in our vibrant, tropical, historic community,

# Neighborhood/Community Affairs Committee Meeting and Land Use Development Committee March 19, 2013

- a) DISCUSSION REGARDING MIAMI BEACH MASS TRANSIT LOOP
- b) DISCUSSION REGARDING TRANSIT ENHANCEMENTS FOR NORTH BEACH

**ITEM #1** 



City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

### COMMITTEE MEMORANDUM

TO:

Neighborhood/Community Affairs Committee and Land Use Development

Committee

FROM:

Kathie G. Brooks, Interim City Manager

Date:

March 19, 2013

SUBJECT:

DISCUSSION REGARDING MIAMI BEACH MASS TRANSIT LOOP

This item was previously discussed at the Finance and Citywide Projects Committee (FCWP) on July 10, 2012 and referred to Neighborhood/Community Affairs Committee

(NCAC).

DISCUSSION REGARDING TRANSIT ENHANCEMENTS FOR NORTH BEACH

This item was referred to Land Use and Development Committee (LUDC) by

Commissioner Libbin at the City Commission meeting of December 12, 2012.

This item is being presented to the joint Neighborhood/Community Affairs Committee (NCAC)/Land Use and Development Committee (LUDC) for discussion and further direction.

### BACKGROUND

In 2012, the City of Miami Beach, in partnership with the Miami-Dade Metropolitan Planning Organization (MPO), initiated a feasibility study to identify a transit service that would be customized to the unique needs of the A1A/Collins Avenue/Indian Creek Drive corridor along the eastern coast of the City. The purpose of the study was to evaluate the feasibility of implementing circulator service in the North and Middle Beach communities, similar to the existing South Beach Local service. The need for a North-Middle Beach Circulator is documented in the Transportation Element of the City's 2025 Comprehensive Plan and in the City's Municipal Mobility Plan.

While A1A is currently served by a dozen Miami-Dade Transit (MDT) bus routes, MDT best serves trips between Miami Beach and destinations elsewhere in Miami-Dade County. Only two routes traverse the length of the corridor between 71 Street and South Beach; other routes cover portions of that length and then connect with the rest of the county across Biscayne Bay. Traveling by bus within the city along the A1A corridor is therefore more complicated and less convenient than would otherwise be expected.

The 2009 Community Satisfaction Survey reported that 81 percent of respondents in the Mid Beach condo corridor (Collins Avenue from 47 Street to 53 Street), and 69 percent of North Beach respondents use a car as their primary mode of transportation. Public transit bus use was six percent or less for the three geographic areas (Mid Beach condo corridor and North Beach). The relatively low reliance on public transit appears to reflect the deficiencies in existing bus service in the study corridor.

Joint NCAC/LUDC Memorandum on Miami Beach Mass Transit Loop -- North-Middle Beach Circulator March 19, 2013
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The proposed service would be configured to serve the high rise condominiums, apartment buildings, and hotels for which transit is a voluntary alternative to private automobile. Generally, auto ownership and household income in the corridor are high suggesting considerable discretion in mode choice for residents and visitors in the corridor. In addition, the service would carry residents and visitors to non-work destinations: restaurants, entertainment venues, and shopping rather than to places of employment (Attachment A). While the service could also carry workers to jobs, the existing MDT service suffices and this proposed service could offer additional options for work trips.

The City's proposed North-Middle Beach circulator service would satisfy the following objectives:

- 1) Provide enhanced transit service via a one-seat ride between a high-density residential corridor (Collins Avenue) and commercial districts (71 Street and 41 Street) thereby linking North and Middle Beach communities and providing a direct connection to the South Beach Local (Attachment A); and
- 2) Customize, or brand, the service to a unique market of non-captive riders and non-work trips via a direct one-seat connection between North Beach and Middle Beach to South Beach. Such a connection is not currently offered by Miami-Dade Transit (MDT). On the MDT system, a transfer to the western portions of 71 Street or 41 Street would require an extended walk or a transfer to other MDT routes; and
- 3) Pursuant to the request from the FCWP Committee in July 2012, the circulator service would serve senior and low income residents by serving the Stella Maris facility located at 87 Street and the Four Freedoms facility located at 38 Street.

In 2012, the City obtained a municipal grant in the amount of \$50,000 from the Miami Dade County Metropolitan Organization (MPO) for the North-Middle Beach Circulator Feasibility Study. The MPO retained the services of Gannet Fleming to perform this study.

As part of the feasibility study, a user survey was conducted along the project corridor. Surveys were distributed in 25 hotels and residential buildings containing approximately 4,800 residents. Responses detailing travel behavior and use of existing transit were received from approximately four percent of those contacted. The responses came from a broad base of the community and expressed an indication that a customized transit service would appeal to those living and visiting the study corridor.

Annual ridership on the proposed North-Middle Beach Circulator, based on the current ridership of the South Beach Local and user surveys conducted by the project team, is estimated to be approximately 1.2 million annually. This is slightly lower than the ridership of the current South Beach Local which is 1.5 million annual passengers. (Attachment B).

The draft feasibility report evaluated three (3) potential alternative pricing/financing scenarios (Attachment C).

### 1. MDT owns and operates the service

If the service is provided by MDT (similar to the South Beach Local service), there would be no capital costs to the City and the estimated annual operating and maintenance cost would be approximately \$3.16 million assuming no County contribution. MDT charges \$131.54 per vehicle-hour for operations and maintenance of its system. It is important to note that based on recent discussions with MDT staff, it is unlikely that MDT would contribute any funds for the operation of a municipal circulator system due to its current budgetary constraints. As an example, the City of Cutler Bay circulator system is operated and maintained by MDT; however, all operating costs are borne by Cutler Bay.

### 2. Miami Beach owns and operates the service

The study recognized that the type of vehicle required by the proposed service should a smaller alternative. A 32 foot heavy duty bus has been identified as the preferred vehicle for this service. In addition, in order to keep headways at 20 minutes, the consultant has identified the need for six buses operating and one bus for spare. If the service is provided by the City, the cost of the service is estimated at \$2.17 million in capital (for the purchase of seven (7) 32' long heavy duty buses); and \$1.38 million in annual operating and maintenance costs based upon current operating costs being paid for similar services in City of Hialeah and City of Doral.

### 3. Turnkey operation by private vendor

Under a turnkey operation, a private vendor would provide the buses, fuel, drivers, maintenance, and insurance under contract with the City of Miami Beach. Under this scenario, it is anticipated that the annual operation and maintenance costs would be similar to a City-provided service scenario due to capital financing costs. Numerous municipal circulators are currently operating under a turnkey operation, including the City of Miami, City of Coral Gables, City of Hialeah, City of Homestead, and City of Doral.

At the Finance and City Wide Projects Committee (FCWPC) meeting on July 10, 2012, the administration explained that fifty percent of the amount of Quality of Life (QOL) funds earned are committed to the payment of a portion of the debt service for the Miami Beach Redevelopment Agency - City Center/Historic Convention Village Bonds, which are used for the development, improvement and construction of certain public areas including a portion of the Cultural Center facilities located within the City Center District. The remaining fifty percent is allocated equally among North Beach, Middle Beach, and South Beach for capital projects that enhance Miami Beach's tourist related areas and various arts and cultural programs. The administration then stated that instead of four categories, the 50% of QOL funds could be broken into 5 categories, where transit would be the 5<sup>th</sup> category. Once the project is fully developed, the QOL funding described above can be used to sustain the capital and operating expenses for a North-Middle Beach Transit Circulator.

The FCWPC recommended that no action be taken on this item in Fiscal Year (FY) 2013 and that the item be ready for discussion and action, if so directed by City Commission, for FY 2014.

On September 10, 2012, the Draft North-Middle Beach Circulator Feasibility Study, prepared by Gannett Fleming and Associates in May 2012, was presented to the Transportation and Parking Committee (TPC) and a discussion ensued regarding the findings and recommendations in the draft feasibility report. The TPC passed a motion encouraging the City to use any funds available to strengthen the current bus service with MDT. If the project moves forward TPC has requested that the service be tied into the current MDT bus system, eliminating stops and shortening the headways. Furthermore, the TPC opined that the City should not be in the business of operating a bus system.

Subsequently, on September 14, 2012, City staff met with MDT to discuss the proposed circulator service for North-Middle Beach and how the City's and County's bus operations could collaborate to meet the transit needs of the community and avoid any duplication of service. Overall, MDT believed that the Collins Avenue corridor is currently well-served by its bus system and that the City's proposed circulator could potentially take ridership from the MDT system. MDT noted that it

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would not operate any unique (or branded) vehicles along the Collins Avenue corridor but could wrap the existing fleet. It is important to note that most of the MDT bus routes operating in Miami Beach, with the exception of the South Beach Local and Route 115/117, extend well beyond the Miami Beach municipal limits, serving municipalities to the north and west on the mainland. Further, if MDT operated the circulator, differential pricing for residents would not be possible. According to preliminary conversations with MDT, they would likely scale back their existing service along Collins Avenue should the City move forward with its circulator service.

On October 30, 2012, during a general discussion on North Beach issues, the City's Planning Board strongly supported efforts to increase the availability of transit options in the North Beach area and passed a Resolution urging the City Commission to refer to the LUDC a discussion item on transportation options in the North Beach Area, including a circulator bus for North Beach and better connector options for South, Middle, and North Beach. At the December 12, 2012 City Commission meeting, the item was referred to the LUDC.

### **ANALYSIS**

Below is a table listing the advantages and disadvantages of each of the three potential alternative pricing/financing scenarios evaluated as part of the North-Middle Beach Circulator Study.

	Scenario	MDT Operates Service	Miami Beach Operates Service	Turnkey Operation by Private Vendor
	Flexibility of operations	Future changes in service are subject to negotiation with MDT	City maintains full control of all aspects of operation	Operational issues must be agreed by contract and may be difficult to change over the life of the contract
	Ability to deliver a premium service to the unique market	Limited ability to offer informational services for residents and tourists and tailor service to particular events and travel patterns	Able to offer the widest range of tour guide, concierge, and customized services to customers.	Customized services can be agreed through contract with some cost implications for future changes.
Criteria	Ability to use customized vehicles	Limited to existing MDT fleet	Full range of choices including alternative fuel vehicles; would need to work with other agencies as the order would be relatively small.	Broad range of choices including alternative fuel vehicles; some limits on availability of certain vehicles, which would depend upon the willingness of the vendor to accommodate City preferences.
	Ability to maintain high service standards	Limited. MDT drivers operate under contract and cannot be expected to perform beyond current MDT standards.	Maximum ability to train drivers and other personnel and establish the highest performance standards. City can directly respond to performance deficiencies.	Performance standards can be established by contract thereby requiring the high quality of service envisioned for this service. Unanticipated issues can be addressed through negotiation.

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Scenario	MDT Operates Service	Miami Beach Operates Service	Turnkey Operation by Private Vendor
Initial Cost	No "up front" costs.  MDT to deliver equipment and personnel on "Day 1."	Requires purchase of vehicles and hiring and training of staff, which represents a substantial initial investment.	Cost of procuring the vendor; higher cost than MDT as operator but most costs would be amortized over the life of the contract.
Annual Costs	Lowest annual cost. Cost would be even throughout the term of the initial five years.	Somewhat higher cost than MDT as operator. Lower costs could be achieved if City staff can be hired for less than current MDT wages as has been done in other cities. Use of existing staff for management and administrative positions could result in cost savings.	Somewhat higher cost than MDT as operator. Efficiencies of a private enterprise and the competitive nature of the contract could result in additional cost savings. Profit margins could reduce those savings.
New Facilities	None. MDT has facilities for storage, washing, and maintenance of buses.	City would need to construct storage and maintenance facility.	Vendor would be responsible for securing a storage and maintenance facility and office space. Some or all of this might be located outside of the City.

MDT is currently evaluating its current countywide bus system through a transit service evaluation study which began earlier this year. The purpose of the study is to evaluate the effectiveness and efficiency of the current MDT bus system in order to make route and service plan changes that are more simple to understand, more efficient to operate, and more reliable. As part of this effort, MDT is considering the advantages and disadvantages of restructuring its bus routes to create a more grid-like network as the current route system has become complex, not as user-friendly as desired, and less efficient and effective. MDT expects possibly implementing any recommended service changes in a phased manner, with the first round of service changes occurring as soon as November 2013. Per the TDP, Route 115/117 would be restructured to operate in only one direction rather than the current bi-directional loop. The MDT service change is proposed to take effect in Fiscal Year 2014.

In this context, City staff will work closely with MDT, to potentially restructure Route 115/117 and other routes serving the A1A/Collins Avenue corridor. Any bus service changes in the North-Middle Beach communities must be closely coordinated between the City and County in order to implement an effective bus service that meets the objectives of this study and the mobility needs of the community.

### RECOMMENDATION

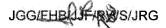
The above information is presented to the joint NCAC/LUDC for discussion and further direction as to which scenario, if any, is the most advantageous to the City. Regardless of the scenario

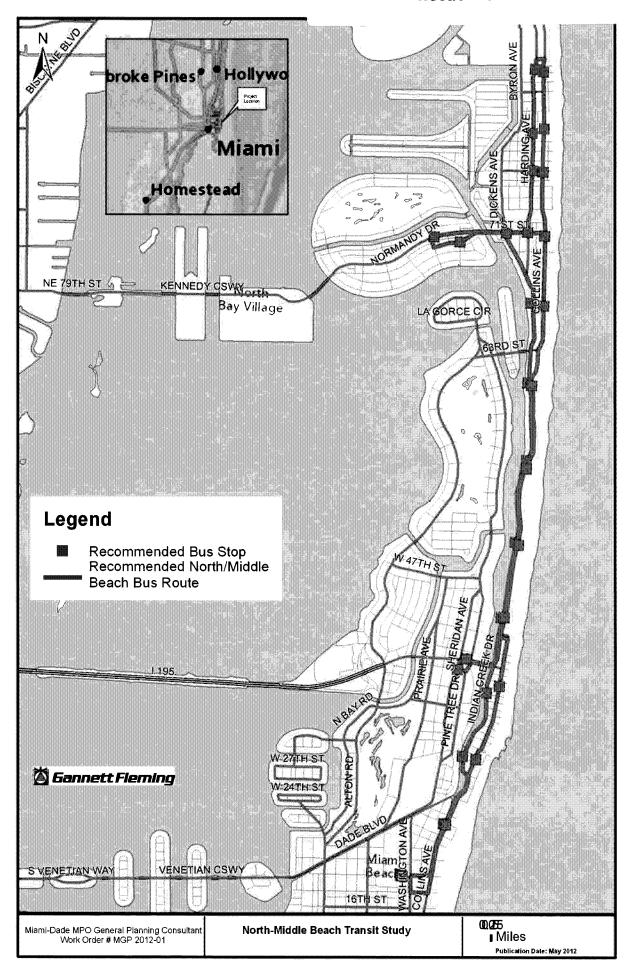
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recommended, the Administration recommends not moving forward until MDT's ongoing comprehensive evaluation of its bus routes is completed and there is a better understanding of how a new grid network of bus routes may impact the City, and the Middle and North Beach communities in particular.

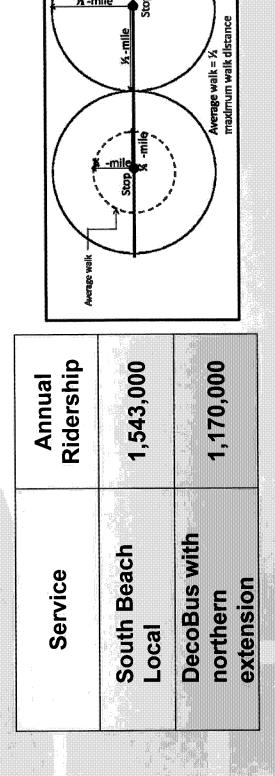
### Attachments:

- A: North-Middle Beach Transit Circulator Route (Revised)
- B: Ridership Estimate for North-Middle Beach Circulator
- C: Alternative Pricing/Financing Scenarios





# Ridership Estimate





Alternative Pricing/Financing Scenarios

Scenario	Capital Costs	Annual Operating & Maintenance Costs	Year 1	Year 2	Year 3	Year 4	Year 5	Total (excluding escalation and time value of money)
MDT Operates Service <sup>1</sup>	2,169,000	3,160,000	3,433,000	3,433,000	3,433,000	3,433,000	3,433,000	17,166,000
Miami Beach Operates Service <sup>2</sup>	2,169,000	1,382,000	3,551,000	1,382,000	1,382,000	1,382,000	1,382,000	9,080,000
Turnkey operation by private vendor³	2,169,000	1,382,000	1,655,000	1,655,000	1,655,000	1,655,000	1,655,000	8,276,000

1 - MDT charges standard price of \$131.54 per vehicle-hour, no additional charges for maintenance, or staff. Vehicle costs are added and amortized over 12 years.

2 - Miami Beach matches private vendor labor costs, maintenance and vehicle storage in existing facilities; City purchases buses and continues service beyond Year 5 or recoups cost through resale. Otherwise, full cost of buses is borne in the first five years.

3 - Private vendor incorporates all costs into annual agreement, which are based on comparable municipal services. Cost of vehicles amortized over 12 years.

# Neighborhood/Community Affairs Committee Meeting and Land Use Development Committee March 19, 2013

MASS TRANSIT CONNECTIVITY

**ITEM #2** 



### COMMITTEE MEMORANDUM

TO:

Neighborhood/Community Affairs Committee and Land Use Development

Committee

FROM:

Kathie G. Brooks, Interim City Manager

DATE:

March 19, 2013

SUBJECT: MASS TRANSIT CONNECTIVITY

This item was previously discussed at the Finance and Citywide Projects Committee (FCWPC) on July 10, 2012 and referred to the Neighborhoods and Community Affairs Committee (NCAC). Subsequently, the item was referred to Land Use Development Committee (LUDC) at the City Commission meeting of December 12, 2012.

### **BACKGROUND**

Effective and efficient mass transit connectivity between Miami Beach and the mainland is vital to the economic and environmental sustainability of the City of Miami Beach and the region. As such, the City of Miami Beach has developed close working relationships with Miami Dade Transit (MDT), the Miami-Dade Metropolitan Planning Organization (MPO), and the Florida Department of Transportation (FDOT) with the objective of providing various short-term transit improvements that enable residents and visitors to effectively travel in our City using the public transportation system. However, a long-term visionary approach is needed to ensure that future transportation demand in Miami Beach is effectively met in the most innovative and environmentally-conscious manner. In his February 28, 2013 state of the County speech, Miami-Dade County Mayor Carlos Gimenez expressed his desire to connect Miami Beach to the urban core of Miami Dade County. The County Mayor went on to say that there is a need to look for innovative solutions to the unacceptable status quo of chocked roadways and grueling daily commutes.

Mass Transit Connectivity was last studied by the MPO, the Board responsible for short range and long range regional transportation planning in Miami-Dade County, in 2004. The study proposed a mass transit connection between Miami Beach and Downtown Miami via the Mac Arthur Causeway. At that time, the City chose to use street car technology. Although the studies prepared as part of the previous mass transit connectivity project yielded satisfactory results at the time, concerns associated with the selected technology (overhead catenary) and funding potential did not allow the project to advance into the preliminary engineering phase. Currently, a mass transit project to connect Miami Beach and the mainland is included in the Miami-Dade MPO 2035 Long Range Transportation Plan (LRTP) as a Priority IV Unfunded Project.

In December 2011, Miami-Dade Transit (MDT) hosted a meeting with officials from a Spanish rail company FEVE attended by representatives from the MPO, City of Miami, and City of Miami Beach. At the meeting, FEVE officials highlighted a catenary-free modern streetcar system currently operating in historic Seville, Spain, and, as a result of that meeting, the City Administration developed a concept of connecting Miami Beach to the mainland via an effective and efficient mass transit system utilizing new catenary-free technology.

The topic was briefly discussed during a City Commission retreat in May 2012 and referred to the FCWPC for discussion. The item was presented to the FCWPC on July 10, 2012 (Attachment

A). The FCWPC recommended that the Administration contact FEVE to explore the feasibility of a catenary-free application in Miami Beach and discussed the possibility of setting aside funding for the project with the provision that it cannot be used without authorization from the Commission and that status updates be provided to the FCWPC.

Subsequent to the meeting, and pursuant to direction from City elected officials, City staff established contact with FEVE, now one of several entities that make-up Tramrail. Tramrail is a public-private enterprise based in Spain that plans, designs, builds, operates, maintains, and finances passenger and commercial rail systems in Spain and abroad. The City obtained a preliminary scope from Tramrail detailing all the tasks needed to study the feasibility of rail transit in Miami Beach.

The City has also been working with County Staff to further develop the concept of establishing mass transit connectivity between the Miami Beach and the County. In order to further advance this project and knowing that any connection established would need extensive County input, the City and County have established a working partnership in pursuit of this goal.

### **ANALYSIS**

The Administration recently submitted a grant application to the Miami-Dade MPO under the Unified Planning Work Program (UPWP) Call For Ideas Program in the amount of \$250,000 to conduct a Feasibility/Concept Development Study for Effective and Efficient Mass Transit Connectivity Between the City of Miami Beach and the Mainland using McArthur Causeway and Julia Tuttle Causeway.

The objectives of the feasibility study would be as follows:

- To define and develop the technical specifications required for the operation of an
  effective and efficient regional mass transit system to connect Miami Beach and
  the mainland. It is the City's preference that the mass transit system would
  operate in a catenary-free mode within urbanized Miami Beach.
- To develop a feasibility analysis for a regional mass transit project utilizing catenary-free technology within urbanized areas of Miami Beach.
- To identify local and regional economic development opportunities associated with the proposed mass transit system, including compatibility with local and regional land use policies and transportation goals.
- To identify social and environmental benefits, including improving safety, mobility, and quality of life for the City of Miami Beach, City of Miami, and the region.
- To identify all potential funding sources available to the City of Miami Beach, City
  of Miami, and Miami-Dade County for the capital, operations, and financing of the
  proposed regional mass transit system.
- To establish a plan for a system that guarantees simple integration with other regional transportation modes, particularly Metrorail and Metromover, thus increasing the potential of intermodality in Miami Beach and the region.

Memorandum to Joint NCAC/LUDC on Mass Transit Connectivity March 19, 2013 Page 3 of 3

The Administration is currently having discussions with the MPO to explore alternate opportunities to fund the feasibility study via a partnership with other stakeholder agencies such as the FDOT, MDT, and City of Miami. Preliminary funding commitments were discussed during a meeting between all agencies involved wherein MDT would provide \$25,000, the City of Miami Beach would provide \$25,000, FDOT would provide \$75,000, MPO will explore the possibility of contributing \$170,000, and City of Miami will be approached with a request for a contribution of \$25,000.

The MPO will develop a broader scope of services based on the feasibility study scope submitted by the City of Miami Beach, for a regional mass transit connectivity feasibility study that would better serve the transit needs of the region as well as the City. The MPO has advised that it is exploring pursuing the study through one of the General Planning Consultants (GPC), therefore they have asked the City to recall its request for the Call for Ideas grant. Should the City Commission endorse this intra-agency partnership, City staff will continue to work with the County for the development of this feasibility study.

In addition to the preliminary feasibility study, the Administration is working proactively with the MPO to identify funding in the MPO Five-Year Transportation Improvement Program for the federally required additional planning and engineering studies associated with a future mass transit connectivity project. The MPO recently initiated the two-year-long process to update the Long Range Transportation Plan (LRTP) to the year 2040, and the City is actively engaged in LRTP Update process and advocating for mass transit connectivity via representation on the LRTP Advisory Committee. This process will help rank the project in a list of priorities and identify further potential funding sources for future construction of the improvement.

### **RECOMMENDATION**

This item is being presented to the joint Neighborhood/Community Affairs Committee /Land Use and Development Committee for discussion and further direction.

### Attachment:

FCWP Committee Agenda Item from July 2012 including photos of FEVE-operated catenary-free streetcar in historic Seville

JGG/JJF/PM S/JRG

F:\WORK\\$ALL\(1) EMPLOYEE FOLDERS\Jose R. Gonzalez\NCAC\Mass Transit Connectivity



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### COMMITTEE MEMORANDUM

TO:

Finance and Citywide Projects Committee

FROM:

Kathie G. Brooks, Interim City manager

DATE:

July 9, 2012

SUBJECT: MASS TRANSIT CONNECTIVITY STUDY

This item was briefly discussed at the Commission retreat held on May 18, 2012 and referred to the Finance and Citywide Projects Committee. The below information is provided to the Finance and Citywide Projects Committee for discussion and further direction.

### BACKGROUND

Pursuant to adopted policies, goals, and objectives in the Transportation Element of the City's 2025 Comprehensive Plan, the City coordinates closely with Miami-Dade Transit (MDT) to ensure that transit service within the South Beach, Middle Beach, and North Beach communities improves mobility and promotes the use of alternative modes of public transit while preserving the historic character of the community.

The City Administration works closely with Miami-Dade Transit (MDT), the Miami-Dade Metropolitan Planning Organization (MPO), and the Florida Department of Transportation (FDOT) on various short term bus transit projects and initiatives in order to provide residents and visitors traveling in our City with an efficient public mass transportation system that offers safe, convenient, reliable, and accessible transit service and connections. However, a long-term visionary approach is needed to ensure the transportation demands of the future are met.

At this time, there is renewed interest, increasing demand, and new options for additional mass transit connections between the City and other parts of the County. In addition, new technology eliminates overhead catenary wires that were one of the concerns of the most recent potential mass transit connections - Bay Link.

**Bay Link Transit Project** 

In 2004, the Miami-Dade Metropolitan Planning Organization (MPO) completed the Miami-Miami Beach Transportation Corridor Study, also known as Bay Link. The Bay Link study consisted of an approximately eighteen (18) mile long bi-directional loop route utilizing the Mac Arthur Causeway, Washington Avenue, Alton Road, 17th Street, and Dade Boulevard corridors. The estimated capital cost of the Bay Link LPA was \$482.7 million and the annual operating and maintenance cost was estimated to be \$12.1 million in 2004 dollars.

On September 8, 2003, during a Special Commission Meeting, the Miami Beach City Commission. by a four-to-three vote, approved the streetcar mode and bi-directional loop route, with some route Finance and Citywide Projects Committee Memorandum – Mass Transit Connectivity July 9, 2012
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modifications. On November 2, 2004, Miami Beach held a Straw Ballot Election which included a non-binding question which asked Miami Beach voters if there should be a light rail streetcar connection between South Beach and Miami. Citizens of Miami Beach voted 55/45 in favor of the Bay Link project.

In spite of the support for the Bay Link Transit project, there were a few outstanding concerns over noise, vibration, and the proliferation of the necessary overhead catenary wires throughout the City's historic South Beach district. The unresolved concerns coupled with a lack of funding and political will at the County level to build, operate, and maintain the proposed Bay Link system resulted in a lack of support to program the funding necessary to complete the Preliminary Engineering phase of the project. Currently, the Bay Link Transit project is listed as a Priority IV Unfunded Project in the 2035 MPO Long Range Transportation Plan.

### **ANALYSIS**

### **FEVE**

In an effort to promote light rail transit technology along certain PTP corridors within Miami-Dade County and improve connections to the existing regional transit system, the Miami-Dade MPO and Miami-Dade Transit (MDT) have recently partnered with FEVE, a state-owned Spanish railway company operating approximately 777 miles of rail service. The rail technology implemented in many urbanized and historic parts of Spain is primarily characterized as a modern streetcar technology that operates in mixed traffic and pedestrian plazas, is not intrusive, and does not require overhead catenary wires between stations throughout the route in order to operate. (Attachment) The streetcars essentially "charge" only at stations via a pantograph mounted on the roof of the streetcar that extends upward to reach the overhead catenaries and charge at the stations and then collapses and hides within the roof structure of the streetcar. The streetcars travel from station to station without needing recharge, thereby significantly reducing the amount of exposed overhead catenary wires within historic cities.

FEVE officials have offered to conduct a study through the MPO to evaluate the feasibility and potential benefits of additional transit rail corridors at no charge to the MPO or Miami-Dade County. The intent of the Spanish-sponsored transit study is to further the development of additional rail transit corridors using the same technology that has been implemented in numerous historic cities within Spain and to alleviate traffic congestion and provide for greater mobility opportunities for Miami-Dade County residents and visitors. On January 26, 2012, the MPO Board passed a Resolution directing the MPO Director to coordinate with relevant Miami-Dade County and municipal officials, City of Miami and Miami Beach in particular, and staff to facilitate a study to be performed by FEVE as to the feasibility for potential light rail transit corridors.

### Miami-Dade MPO Study - Tolled Managed Highways with Rapid/Enhanced Bus Routes

The Miami-Dade MPO is currently undertaking a planning study with the primary objective of developing an agency-supported, short-term, cost-feasible, countywide plan for an interconnected network of Tolled Managed Highway Facilities with rapid/enhanced bus service routes and infrastructure. Among the eight countywide corridors that will be highlighted as part of this MPO study is the Bay Link corridor - Mac Arthur Causeway (Downtown Miami Government Center to Miami Beach City Hall).

The study will focus on the concept of implementing variable pricing on existing free roadways or on new lanes on existing free roadways. This approach involves evaluating the feasibility of

implementing segregated managed lanes with all day variable pricing on existing un-tolled highways (such as the I-395/Mac Arthur Causeway and the I-195/Julia Tuttle Causeway). The study will evaluate the potential of using new revenues generated by the tolled managed lanes/facilities to fund the capital, operating, and maintenance costs of implementing enhanced or express bus services or other type of premium transit, such as light rail.

Traditional strategies of adding more roadway capacity on our major highways and more buses on our local street network are not only unaffordable, they are most often adversely impactful, time consuming to implement, and do not solve the transportation problem in an effective manner. If we continue to follow the same approach as in the past, congestion will only continue to worsen becoming more intense and for longer periods of time. The current condition and approach has and will continue to have a disproportionate impact on lower income travelers who typically do not have a choice and must rely on slow-moving street-running bus service.

It is time that we address the current and expanding transportation problem in our City with a new, expedited, financially and environmentally sustainable approach. Toll managing the Mac Arthur Causeway and/or Julia Tuttle Causeway can be financially self-supporting for an enhanced bus service or light rail transit and represents an equitable approach to providing travel options for everyone. A toll-managed Mac Arthur Causeway and/or Julia Tuttle Causeway, for example, can be used to alter travel behavior and patterns by mode, by facility, and by time of day. Implementation of toll managed facilities would have very limited adverse impacts to the human and natural environment while over long-term they could result in fewer adverse impacts than the alternative of doing more of the same. Tolled managed highway facilities are an innovative, lower cost alternative to traditional highway construction that can offer a variety of travel options for avoiding congestion, maintaining a congestion-free alternative 24/7.

### OPTIONS FOR CONSIDERATION

- Re-evaluate a light rail transit/streetcar project to connect Miami Beach to the Mainland.
  This alternative would entail revisiting the Bay Link Transit Study and reevaluating the
  Refined Locally Preferred Alternative in the context of applying new state-of-the-art
  technologies for propulsion systems, such as that currently in use by FEVE in Spain, that do
  not require the proliferation of overhead catenary wires throughout the City and minimize
  noise and vibration effects.
- 2. Evaluate the feasibility of implementing a cross-Bay Bus Rapid Transit (BRT) system. This alternative would explore opportunities for BRT operation along the general-use lanes and shoulders of the Mac Arthur Causeway and/or Julia Tuttle Causeway. A BRT mode would require signal pre-emption that would serve as a "queue jumper" and allow the BRT vehicles to proceed through signalized intersections without stopping.

Although the consideration of these options can be done at different stages, a comprehensive look at the link between the City and the mainland would explore the feasibility of both alternatives. This study would look at both options using a range of service oriented and financial criteria while exploring the new vehicle technology that was not available in the 2004 Bay Link Study. In an effort to enhance the transit connection between Miami Beach and the mainland, the administration would go through extensive coordination with Miami-Dade MPO, Miami-Dade Transit (MDT), and Florida Department of Transportation (FDOT). The coordination with local agencies would facilitate the process since the study requirements would not be as labor intensive as those required by the

Finance and Citywide Projects Committee Memorandum – Mass Transit Connectivity July 9, 2012
Page 4 of 4

Federal Transit Administration (FTA). Based on similar studies done by other local cities and taking into account the extensive work that has been done on this front by the Miami Dade MPO, the administration estimates that a feasibility study and the preliminary engineering for a Miami Beach — Miami Mass Transit Connectivity project would have an estimated cost of \$320,000.00 that could be funded from the Concurrency Fund .

The above information is being provided to the Finance and Citywide Projects Committee for discussion and further direction.

Attachment:

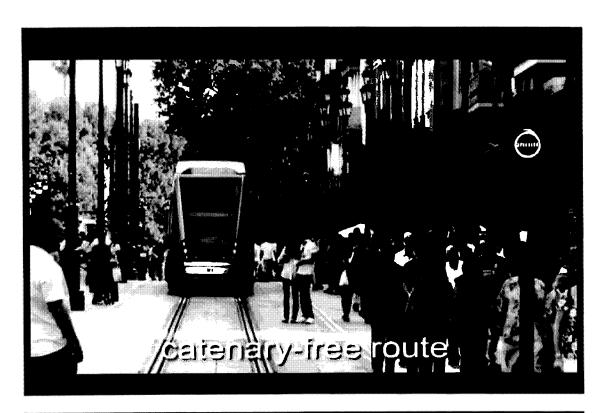
Photos of FEVE

F:\WORK\\$AjL\(1) EMPLOYEE FOLDERS\FIORELLA SARMIENTO\ Mass Transit Connectivity

KGB/FHB/JJF/RWS/JRG

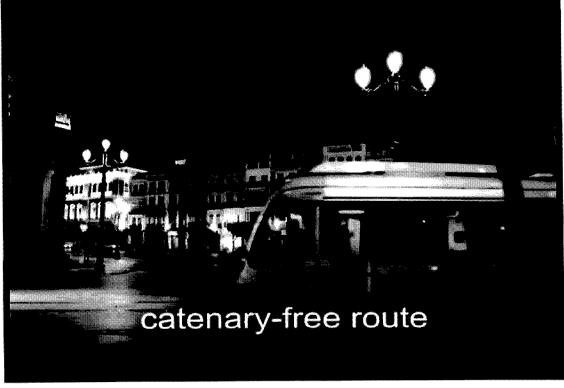
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## Neighborhood/Community Affairs Committee and Land Use Development Committee Meeting March 19, 2013

- a) DISCUSSION REGARDING THE BIKE MASTER PLAN
- b) DISCUSSION REGARDING THE COMPREHENSIVE BIKE MASTER PLAN
- c) DISCUSSION REGARDING THE IMPACT OF BICYCLES INCLUDING THE DECO BIKE PROGRAM AND THE BIKE MASTER PLAN - AND OTHER VEHICLES, SUCH AS SEGWAYS AND SKATEBOARDS, ON SIDEWALKS AND PEDESTRIAN PATHS
- d) DISCUSSION REGARDING UPDATING THE BIKEWAYS MASTER PLAN TO BETTER INTERACT WITH THE CITY'S TRAFFIC CALMING PLANNING

**ITEM #3** 

Discussion Regarding the Bike Master Plan March 19, 2013 Page 1 of 5



City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

### COMMITTEE MEMORANDUM

Neighborhood/Community Affairs Committee and Land Use Development

Committee

FROM: Kathie G. Brooks, Interim City Manager

DATE: March 19, 2013

SUBJECT: DISCUSSION REGARDING THE BIKE MASTER PLAN

This was referred to the Neighborhoods and Community Affairs Committee (NCAC)

for discussion at the Commission Meeting on February 9, 2011.

DISCUSSION REGARDING THE COMPREHENSIVE BIKE MASTER PLAN

This item was referred to the Land Use Development Committee (LUDC) at the

Commission Meeting on December 14, 2011.

DISCUSSION REGARDING THE IMPACT OF BICYCLES - INCLUDING THE DECO BIKE PROGRAM AND THE BIKE MASTER PLAN - AND OTHER VEHICLES, SUCH AS SEGWAYS AND SKATEBOARDS, ON SIDEWALKS AND PEDESTRIAN PATHS

This item was referred to the Neighborhoods and Community Affairs Committee (NCAC).

DISCUSSION REGARDING UPDATING THE BIKEWAYS MASTER PLAN TO BETTER INTERACT WITH THE CITY'S TRAFFIC CALMING PLANNING

This item was referred to the Neighborhoods and Community Affairs Committee for discussion at the Commission Meeting on September 14, 2011.

### BACKGROUND

In October 17, 2007, the Miami Beach City Commission adopted the Atlantic Greenway Network (AGN) Master Plan also known as the Bike Master Plan. This master plan was focused on internal connectivity for bicycles by way of a continuous network of on-street bicycle facilities, shared-paths, Beachwalks, and Baywalks, and on creating connections between the City network and the County's and State regional bicycle network.

As an outcome of the AGN Master Plan, the City has constructed over 15 miles of bicycle facilities and has over seven more miles in construction and design stages. As part of this bicycle network construction, the City has continued phased construction of Beachwalks and has improved bicycle parking throughout the City. These facilities amount to about 70 percent of the bicycle facilities planned in 2007. (Attachment A- Bike Facilities Map, which is the subject of

Discussion Regarding the Bike Master Plan March 19, 2013 Page 2 of 5

the update effort).

In response to the administration's attention to bicycle transportation in the City, the 2012 Community Satisfaction Survey shows an increase in bicycling and walking as the primary method of transportation from six (6) percent to 11 percent. The number of residents bicycling and walking as the primary method of transportation is even more predominant in the South Beach area with 26 percent. In 2012, the City was also recognized by the US Census Authority for being one of National Top Ten (10) Cities for commuter bicycle rides in the United States.

Similar to other master plans, the AGN Master Plan was intended to be a dynamic plan that should be updated as the City evolves and transforms itself into a bicycle-friendly community. In early summer of 2012, the City began the effort of updating the AGN Master Plan with the help Atkins North America Inc., and Street Plans Collaborative, an innovative urban planning firm based out of New York City, which has authored several progressive master plans throughout the country, including Santa Monica, Tucson, and Miami. Some of the bike master plans completed by Street Plans Collaborative have received national recognition by the League of American Bicycles, including Tucson (Gold Level), Santa Monica (Bronze Level), and Miami (Bronze Level). This update of the AGN Master Plan has been anticipated to be a two (2) phase project consisting of various tasks with the common goal of improving the safety and connectivity of bicycle transportation in Miami Beach. Phase I consisted of two (2) public summits, existing master plan review, and a handlebar survey.

The public summits, one in North Beach and one in South Beach, served to inform residents and agencies of the current best practices available. The summits served as a forum for citizens to voice their safety, connectivity, and bicycle transportation concerns in the City. The summits had a total of 51 attendees, including two City elected officials.

The team provided an extensive presentation on most of the current and innovative approaches to bicycle network planning and design. Following the presentation, the team conducted visual surveys related to best practices, allowing residents to express their preferences when it comes to bicycle facility treatment. During first meeting (North Beach Youth Center), residents expressed discontent with lack of connectivity from North Beach to South Beach. Another predominant comment was the lack of safe corridors for bicyclists. Residents expressed the desire to implement some of the best bicycle network planning and design practices available. During the second meeting, the team received several comments regarding safety for bicyclists and pedestrians and the need to educate and enforce both bicyclists and motorists. Residents cited specific cases of unsafe designs within the City. All the information from the meetings was collected and quantified by the team and results were posted on the project website.

Also as part of Phase I, the team also conducted a review of the existing AGN Master Plan (Attachment B). The deficiencies listed below were identified during the review process:

- Report does not identify the impact of each facility to the cross-section of the corridor
- Report lacks data collection effort to quantify the impact to vehicular traffic
- Report does not have an inventory on existing corridor connectivity, bicycle parking, vehicular parking, and current safety deficiencies
- Report lacks definition in the specific treatment for pedestrians and bikes
- Report does not significantly address intermodal connectivity with existing proposed facilities
- Plan does not look into innovative approaches for bicycle facility design

Discussion Regarding the Bike Master Plan March 19, 2013 Page 3 of 5

- Report does not identify any street lighting or pedestrian lighting deficiencies that would jeopardize the safety of bicyclists and pedestrians
- The report does not identify any intersection treatment that would help improve the safety of pedestrians

A "handle-bar" survey was part of the data collection effort for Phase I. This task required the bicycle experts to ride the existing bicycle facilities and other corridors in the City. This effort was followed by the submission of a report (Attachment C) identifying the strengths and weaknesses of the current road network. The following are some of the highlighted corridor deficiencies:

- Collins Avenue -North of Espanola Way: Survey team identified safety problems with high speed of vehicles and a high number of turning movement conflicts.
- 5 Street: Surveyor identified clear conflict points at intersections
- 16 Street: Turning vehicles do not yield to bikes. This is a safety issue that needs to be addressed with better intersection treatments.
- Washington Avenue: Bicycle parking demand surpasses the demand.

The team created an interactive project website (bikemiamibeach.org) to continue the public outreach task. The website serves as a source of information and contains all the documents gathered as part of Phase I. Recently, the website has been made interactive to provide the residents with a map capable of recording information. Residents will now be able to link their comments to a specific site on the map. Also as a part of the website, residents will obtain all the real time information and progress of upcoming tasks. The website will put out announcements for citizens to join the team in upcoming City bicycle rides with the purpose of further data collection. (Handle-bar surveys). The residents participating will be able to provide comments on specific network issues.

The tasks completed in Phase I show that the current plan identifies a core network but lacks on connectivity, analysis of existing cross-sections, analysis of intermodal connectivity, and does not look into the implementation of innovative practices to improve safety. The first phase recognized various safety hazards in the available bicycle facilities and identified basic strengths and weaknesses affecting bike traffic in various City corridors. Due to weather conditions, geographical conditions, land use intensity, and grid system, the team recognized the City's potential to become an enjoyable, safe, and efficient bicycling community.

The scope for Phase II will focus on developing alternatives for improving the connectivity deficiencies along the current network. In order to fill in these connectivity gaps, the team will explore current best practices, current City policies, right of way characteristics, and corridor geometrics. In addition, the team will provide a list of recommended improvements to current facilities. The team will develop a set of guidelines that will be used by the City to design bicycle facilities depending on corridor geometrics and existing right of way widths. These guidelines will be used to insure that the most appropriate bicycle facilities are incorporated into future projects.

### DecoBike

Parallel to the city-wide facility construction, in 2011 the City launched its first bicycle sharing program in partnership with Decobike. Decobike has become one of the top bike sharing programs, comparable nationally only to Washington DC, with over 2 million rides since its

Discussion Regarding the Bike Master Plan March 19, 2013 Page 4 of 5

inception. The bike sharing program has been successful in promoting bicycles as a safe and sustainable mode of transportation. In addition, Decobike has reported that 75 percent of all trips are completed by residents.

### Impact of Bicycles, Skateboards, Segways and Other Vehicles on Pedestrian Paths

In an effort to minimize conflicts and increase the safety of pedestrians in the City, the administration has approved an ordinance to control some alternative methods of transportation. In 1997, the City approved Ordinance No. 97-3103 outlining regulations for the lawful performance of skateboarding, roller skating, in-line skating, and personal motorized means of transportation. This ordinance restricts the use of skateboards and motorized means of transportation, except for wheelchairs or other motorized devices when used by a disabled person, in, on, or upon any portion of Lincoln Road Mall from Alton Road to Washington Avenue and the West side of Ocean Drive.

In October 2012, the Mayor and Commission approved an amendment to Chapter 70 of the Miami Beach City Code (Ordinance No. 2012-3780) with the purpose of outlining additional rules and regulations for safe operation of motorized transportation devices (Segways). This ordinance makes it unlawful to use any motorized means of transportation in, on, or upon any sidewalk or sidewalk areas in the City, except wheelchairs or other motorized means of transportation when used by a disabled person, and electric personal assistive mobility devices i.e. Segways. The ordinance explains that the latter is restricted to a maximum speed of eight (8) miles per hour.

Shared-use paths like the Beachwalks, Cutwalk, and Baywalk are also a source of concern for some pedestrians. These facilities were approved for bicycle use as part of the 2009 AGN Master Plan. The Public Works Department will conduct an observation and inspection of these facilities to identify conflict points. These conflict points will be studied to determine if additional signage and safety measures would be beneficial.

### Traffic Calming

On April 20<sup>th</sup>, 2005, the City Commission approved a resolution directing staff to pursue the development of a citywide traffic calming program. The City engaged a consultant for the development of this program. This effort was divided into two phases which the consultant worked on concurrently. These two phases were the Traffic Calming Manual and a Traffic Calming Pilot Project.

The consultant team gathered and reviewed several documents from other cities dealing with these subjects that served as the methodology for traffic calming. The data collected during the Traffic Calming Pilot Program Phase served to establish the thresholds set forth in the Traffic Calming Manual.

The City of Miami Beach addresses traffic calming requests on a case by case basis. The Traffic Calming Manual outlines the process to be followed the residents requesting traffic calming and staff evaluating the request. The manual was approved by the County in June 2010 and adopted by City Commission in June 2011. In addition to these individual requests, the City's Neighborhood improvement program has pursued the narrowing of lanes wherever possible in order to help the livability and traffic calming of the neighborhoods.

Traffic calming is not a pre-requisite of a bike master plan. Traffic calming relates to speed,

Discussion Regarding the Bike Master Plan March 19, 2013 Page 5 of 5

volume, and control of cut-through traffic. The City of Miami Beach has limited corridors that serve as traffic connections. These corridors, known as arterials, carry the heavier volumes and higher speeds. Due to the City's urban characteristics, some of drivers are forced to use urban collectors and residential streets to reach their destinations. This additional traffic through residential streets is denominated as cut-through traffic. As part of the 2005 Traffic Calming program, the consultant identified Prairie Avenue, North Bay Road, and 34 Street as pilot corridors warranted for traffic calming. These corridors are connection points from arterial to arterial, and therefore experience heavy volumes and high speeds from cut through traffic.

Since the approval of the Traffic Calming Manual, the Public Works Department has collected data and completed traffic calming studies on various corridors. To date, 51 Street is the only corridor that met the necessary criteria to warrant the implementation of traffic calming measures.

### CONCLUSION

This item is being presented to the joint Neighborhood/Community Affairs Committee (NCAC)/Land Use and Development Committee (LUDC) for discussion and further direction.

Attachments:

A: Bicycle Facilities Map

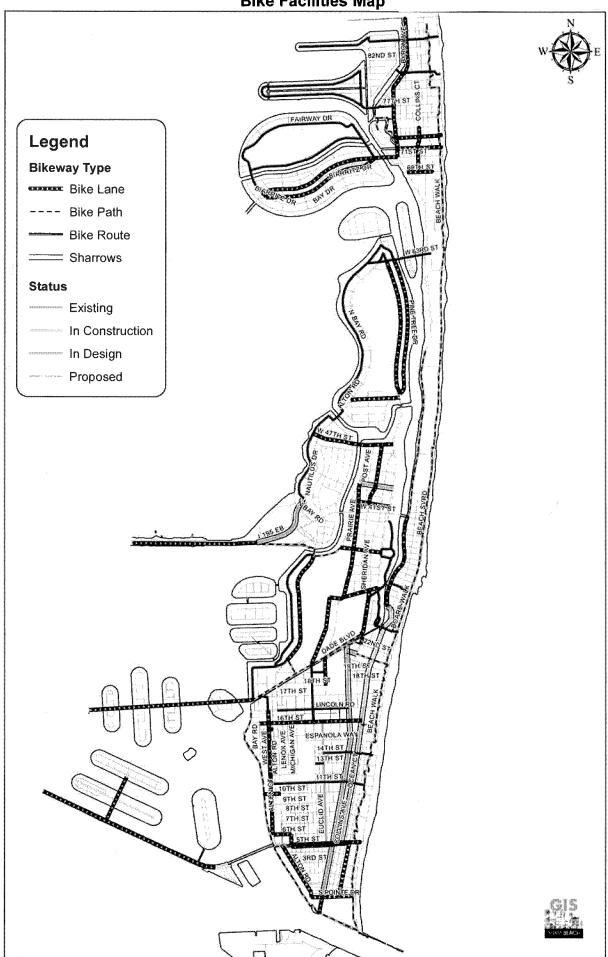
B: Literary Review of Existing AGN Master Plan

C: Handle-Bar Survey

JGGK#E/RW9/JRG/JFD

F:\WORK\\$ALL\(1) EMPLOYEE FOLDERS\Josiel Ferrer\MEMOS TO COMMITTEE\Joint Committee Meeting

**Bike Facilities Map** 



**NCAC #29** 

### Miami Beach Atlantic Greenway Network Master Plan

### **Preliminary Review Comments**

### **General Comments:**

- The AGN identifies 2 public meetings which were conducted in the development of the AGN. As this is a major infrastructure project effecting every neighborhood and commercial interest in the City, significant public involvement and participation is recommended to ensure community partners are engaged and invested in the AGN to ensure adoption. As the financial impacts on the City are significant, a fully vetted plan will assist in developing support and consensus with local political leaders, MPO, County and State. Potential funding and Grant sources for improvements will also require a higher level Community notification/involvement.
- Overall the inventory seems acceptable for this type of study and general connectivity objectives are good. The report lacks conclusions based on the inventory for transit, impacts on roadway cross sections, connectivity, vehicular and bike parking, safety, utility impacts, specific cost and traffic counts.
- The report references the Miami Beach Bicycle Facility Design Standards Manual. Is this a separate document? The AGN does not provide substantial definition or description of the proposed 'greenway' physical requirements or minimum standards.
- The AGN does not significantly address separate treatments for bikes and pedestrians. Further clarifications are needed to address both? Safe routes to schools are also a critical component which should be addressed in this type of Citywide Bicycle and Pedestrian Master Plan.
- Analysis of different potential facilities types with their opportunities and constraints appears appropriate for a Master Plan document.
- The report does not explain the objectives for each trail in the AGN. Conclusions including:
  - o Why is it being proposed?
  - o Why this location?
  - o Why is it a bike lane as opposed to path or a route?

It may be difficult to validate the plan with the Community without reasonable conclusions on the alignment validated in the AGN.

• The AGN does not validate the reasons for established priorities or identify significantly how these priorities are related to funding or other CIP budgets.

- It doesn't seem to fully describe which agencies are proposing what potential trails (FDOT, Dade County, FDEP, etc.) It just shows trails and lanes proposed.
- The report does not mention ADA requirements or safety requirements for inclusion in the Master Plan.
- Intermodal connectivity with existing and proposed facilities is not significantly addressed. Issues such as bike parking, trailheads, bike lockers, minimum standards for adjacent development which will respond to future enhanced bike facilities are not addressed.
- Effect of proposed bike lanes on existing on street or beach parking and signalization is not addressed.
- AGN does not provide typical cross sections reflective of the majority of segments to determine feasibility and cost impacts.
- The Master Plan does not appear to propose any innovative approaches or facilities.
- The AGN did not address project lighting and where they may be required.
- The AGN provides a very order of magnitude summary of proposed improvements. Recommend that costs be developed for all segments based on the actual cross section/requirements to determine feasibility.

### Other Specific Comments:

- In general, greenways in urban areas strive to create and preserve a natural environment which could be enjoyed by pedestrians and non-motorized traffic. This report focuses on the development of bike facilities linking different types of attraction points, but it does not really offer alternatives to incorporate or encourage pedestrian traffic. In addition, it does not promote the creation of additional green areas within the City of Miami Beach.
- On page 2.8 (CIP and GO Bond Projects), the second paragraph mentions the City's GO Bond was planning for various projects based on citizens inputs. Most of the projects included: safety improvements, sidewalk repairs, improved parking, additional trees, etc. However, no specifics on location for the projects and projects' schedule are provided. Should include a list of approved projects and whether they are funded or need future funding.

**NCAC #31** 

Page 2.30 – Existing Bicycle and Pedestrian Facilities. In regards to Bicycle Facilities it is recommended to include how many miles of Bicycle Facility the City of Miami Beach currently has. How many of those miles are in North, Middle and South Beach. In addition, it should be identified whether the Bicycle Facilities and shared-paths, designated bicycle lanes, undesignated bicycle lanes, wide shoulders, etc.

In the case of the sidewalks it should be specified whether the sidewalk width is compliant with current FDOT and ADA code requirements. Do they provide sufficient width, do they provide ramps for people with disabilities, are the signal heads and push buttons for pedestrian working properly and compliant with code requirements?.

- Page 2.38 Drainage Canals and Waterways. In this section it is recommended to include a map highlighting the current waterways and drainage canals. In addition, information should include some data in regards to whether these water bodies will be undergoing some type of improvements or whether they could be revamped to be part of the "greenway" environment that the City of Miami Beach is trying to implement.
- Section 3.0. By expanding the information provided in Section 2.0, section 3.0 might even be eliminated. Most of the information in this section is a duplicate of what was presented in Section 2.0.
- Section 4.0. This section is supposed to present the recommended projects to create and enhance the greenway. To basically encourage pedestrian flow and non-motorized mode of transportation. However, the information only concentrates in the already "identified gaps" (9 projects), all of the short-term and long-term recommendation concentrate on the improvement or development of new bike facilities. Only Project 7 (West Avenue and 17<sup>th</sup> Street), recommends (in the long-term solutions) the purchase of the corner lot and create a gateway/green space park. There are no recommendations on using multi-modal transportation in order to encourage pedestrian flow in addition to bike flow.

Overall, this section presents various maps which are not either referenced in the body of the report, or explained to understand the information they are displaying.

 Section 5.0. This section is supposed to outline the steps needed to fully implement the projects and develop the Atlantic Greenway Network; however, this section does not give a defined time line for the implementation of the projects. Although it suggests some policy changes in order to satisfactorily accomplish the recommended projects it is not clear on the steps that need to be taken. The recommended improvements listed on the report only focus on the development of bikeways. A greenway should focus on creating an environment that blends nature with pedestrian and bike traffic. Since the City of Miami Beach is highly urbanized, a plan should be created in order to transform some underutilized areas into natural attraction points. This could include developing a park at the shores of a canal. Transforming a current parking lot into a green park and making it accessible through transit system or bike.

### Recommendations

- Determine feasibility and actual cost of proposed segments. Additional preliminary engineering is recommended to refine feasibility and identify constraints which may affect proposed AGN alignment and priorities.
- Major corridors within the study area should be listed including their specific characteristics such as functional classification, access management classification, number of lanes, speed limits, typical sections and agency under jurisdiction (FDOT, County, City, etc) be included. This information will allow determining whether sidewalks should be widened or lane width narrowed in order to fit pedestrian/bike facilities.
- Parking should be considered a separate element from Transit. The number of parking facilities should be listed and the number of parking spaces included. It should also be specified whether the parking facilities are surface lots or parking structures.
- Transit lines and Transit Stops serving the City of Miami Beach as a whole and lines serving (North, Middle and South Beach) should be provided. Also, the number of Transit Stops (located in North, Middle and South Beach), and the corridors that they serve (NB/SB and EB/WB) should be specified. This will allow determining whether additional transit systems such as Trolleys should be considered in order to promote a pedestrian friendly environment.
- Initiate additional City wide Public Involvement to vet the proposed AGN alignments and costs. Identify community Hot Button issues early for internal discussion and strategy. Develop a communication plan for the AGN and the community.
- Vet AGN with MPO, County, FDOT and others to assist in developing priorities based on partner priorities. Reevaluate priorities based on input. Recommend plan add a layer to assist in communicating partner projects and timing.
- Vehicular and bicycle parking, trailheads and destinations need further evaluation and linkage to the AGN. Requirements for support facilities such as bike lockers should also be addressed.

- Address traffic counts and how proposed facilities are related. Address alignment selection based on current and projected counts.
- Address the effect of Bike Lanes on existing street parking.
- Address the need for R.O.W or easements and associated cost.
- Determine political support for proposed improvements based on community input and hard costs. Include maintenance cost and required infrastructure improvements. Develop workable long term phasing strategy based on all project partners to create a dynamic and fluid plan.
- Develop a funding opportunity schedule. Initiate/identify a means to develop/apply for upcoming submittals.
- Provide an assessment of existing pedestrian facilities along proposed alignments and recommend needed improvements.
- The Master Plan tends to be a visionary document. It may identify but not necessarily answer all critical issues. As many issues do not appear to have been evaluated to a feasibility level, it is difficult to determine if the AGN and proposed alignments are feasible or vetted with all project partners. Additional analysis is recommended to determine if this very urban project can be developed within proposed R.O.W, with community support, within budgetary constraints, and with a logical phasing approach.



### Introduction

In order to become familiar with Miami-Dade County's bicycle planning history, and specifically as it relates to the City of Miami Beach, a review of more than 20 city, county, and state plans was conducted. This effort connects the current 2012 Atlantic Greenway Plan Update planning process with those from the past and is being undertaken to identify lessons learned and key strategies for successful implementation of the City's future master plan. This review begins with the oldest relevant plan: The 1997 Miami-Dade MPO Bicycle Master Plan. This document forms the basis for many subsequent plans and studies conducted over the past fifteen years.

The completion of this review will prevent redundancy, reduce chances of error in determining the placement of planned bikeway infrastructure, and help dovetail this current bicycle master plan process into those planning efforts already underway at the local, county and state level.

Below is the list of plans reviewed and the year they were completed. Following is a brief summary and analysis focusing on the most germane information pertaining to the ongoing development of the Miami Beach bicycle network.

### Plans, Studies, and Documents Reviewed:

- Miami-Dade Transportation Improvement Program (2012)
- FDOT Evaluation of Share Lane Markings in Miami Beach, Florida (2012)
- FDOT State Route A1A Bicycle Master Plan (2011)
- Miami Dade County Long Range 2035 Transportation Plan (2009)
- Miami Beach Atlantic Greenway Network Master Plan (2008)
- Miami-Dade MPO Mountain Biking / Unpaved Trails Inventory (2008)
- Miami-Dade MPO Bicyclist Count (2008)
- Miami-Dade MPO Bikeway Map (2008)
- Miami-Dade MPO Bicycle and Pedestrian Crash and Fatality Report (2008)
- Miami Beach West Avenue Basis of Design Report (2007)
- Miami-Dade MPO Bicycle Facilities Plan (2007)
- Miami-Dade MPO Parks Master Plan (2007)
- Miami Beach 16<sup>th</sup> Street Phase I Basis of Design Report (2007)
- Miami-Dade MPO Crash data (2006)
- Miami-Dade MPO Bicycle Safety Plan (2006)
- Miami-Dade MPO Long Range Transportation 2030 Plan (2004)
- Miami-Dade MPO Bikeway Priority Feasibility and Evaluation Study (2003)
- Miami Beach Nautilus Neighborhood Basis of Design Report (2002)
- Miami-Dade MPO Bicycle Facilities 2025 Plan (2001)
- Miami-Dade MPO LRTP 2025 Bike Suitability Study (2001)
- Miami-Dade MPO Bicycle Facilities Plan (1997)



### Miami-Dade Transportation Improvement Program (2012)

**Summary:** The Transportation Improvement Program (TIP) is the project funding policy document for Miami-Dade County transportation projects. Updated every five years, the TIP includes investment priority for all modes of travel, including bicycle facilities.

Analysis: Three bikeway projects in Miami Beach were included in the 2012 TIP. They include

- Beach walk between 46<sup>th</sup> and 64<sup>th</sup> Streets
- Beach walk between southern edge of Lummus Park and South Pointe Drive
- 5<sup>th</sup> Street between Collins Avenue and West Avenue

The segment along 5<sup>th</sup> Street has already been completed.

### FDOT Evaluation of Share Lane Markings in Miami Beach, Florida (2012)

**Summary:** FDOT hired researchers from the University of North Carolina Highway Safety Research Center to evaluate how the applications of Shared Lane Markings (sharrows) performed in Miami Beach. More specifically, the researchers recorded hours of videotape to analyze bicyclists on Washington Avenue before and after the application of sharrows. The study results are not just locally significant, but important statewide, as Washington Avenue was the first thoroughfare in Florida to experiment with sharrows.

### Analysis:

In general, the research team found numerous positive results associated with the use of sharrows. Specifically, bicyclists rode approximately 10.5 inches further away from parked motor vehicles after sharrows were introduced, which means more riders were passing outside of the door zone. The spacing between motor vehicles in the travel lane and those parked also increased about 4.5 inches. This effectively gives cyclists more operating space. Finally, the percentage of bicyclists using the sidewalk decreased from about 55 to 45 percent. All of the findings associated with the evaluation were statistically significant.

### FDOT State Route A1A Bicycle Master Plan (2011)

Summary: A 22-mile bicycle plan for the State Route A1A corridor. The route is contained entirely within the FDOT District 6 boundary, and includes the municipalities of Golden Beach, Sunny Isles Beach, unincorporated Miami-Dade County (through Haulover Park), Bal Harbour, Surfside, Miami Beach and the City of Miami via the MacArthur Causeway. The Plan is essentially a segment-by-segment facility plan intended to connect the 6 municipalities through which SR A1A passes with bicycle facilities. The Plan's main components include:

- Design Standards
- Background Info



- Project Approach
- Project Segmentation
- Concept Plan for each segment
- Alternative Routes analysis
- Probable Cost Analysis
- Shared Lane Marking Implementation

Analysis: The SR A1A corridor plays an important role in the City of Miami Beach. It currently provides the main north-south connection for the entire eastern portion of the City. In South Beach, A1A's MacArthur Causeway also offers one of the three primary connections between Miami Beach and the City of Miami. Unfortunately, it is currently one of the more difficult thoroughfares on which to bike in the city. This Plan presents needed opportunities to enhance the corridor's bicycle-friendliness.

Given the wide range of right-of-way and land use characteristics, the Plan does well to connect the entire 22-mile corridor with bicycle facilities. In some areas, the implementation of a context-sensitive facility is clearly feasible and desirable, while in other areas it remains a challenge from an engineering, design, and user perspective. The Plan is very much conceived at the macro level and does not include details of the needed transitions between facility types/context that would need to be considered closely so that the corridor remains as continuously connected as possible.

### Miami Dade County – Long Range 2035 Transportation Plan (2009)

**Summary:** The 25-year planning and policy document for Miami-Dade County transportation. Updated every five years, the plan includes investment priority for all modes of travel, including bicycle facilities.

Analysis: Compared to the previous 2004 plan, the 2035 LRTP takes a more aggressive approach to designing and constructing bikeways. The map of prioritized projects for 2010-2014 demonstrates a fairly equal distribution of projects, including the implementation of Miami-Dade's first bicycle boulevards. On Miami Beach, priority projects include the completion of the beach walks and the development of a bicycle path along Dade Boulevard, which is currently under construction.

The intermodal portion of the plan provides few details, but underscores the importance of investing in bicycle and walking as forms of transportation. Indeed, Florida, and specifically the Miami region, is one of the least safe places to walk or bicycle and is in need of expanding safe, attractive, and connected facilities.

Miami-Dade MPO: Mountain Biking / Unpaved Trails Map (2008)

Summary: A single map depicting all unpaved trails in Miami-Dade County.



Analysis: The Miami-Dade MPO produced a useful map that displays all unpaved trails and routes designed specifically for, or well-suited to off-road biking enthusiasts. Mountain biking is largely a recreational activity that piques the interest of many riders in south Florida for which the map will prove useful. However, within the City of Miami Beach, there currently are no unpaved trails available for such use.

### Miami-Dade MPO: Bicycle Count (2008)

**Summary:** The MPO used 45 different points and intersection locations throughout the County to tally bicycle and pedestrian traffic. The effort was intended to demonstrate and track high activity areas. Counts are to be periodically updated so that an increase or decrease in use patterns may be logged.

Analysis: The data was gathered on weekday mornings and weekend afternoons in the summer and winter of 2008. Eight counts were taken in Miami Beach. They include:

- Venetian Causeway near Rivo Alto Island
- Washington Avenue & 16 Street intersection
- Collins Avenue near 16 Street
- 5<sup>th</sup> Street near Meridian Avenue
- Ocean Drive & 10 Street intersection
- Alton Road near 16 Street
- West Avenue near 16 Street
- 71 Street Bridge near Bay Drive

The results reveal that a vast majority of bicyclists in the City of Miami Beach are adult males who don't wear helmets. This has clear implications for future safety countermeasure and education efforts, especially as it relates to creating conditions that attract a more diverse demographic to ride bicycles. Particularly high activity areas included the Venetian Causeway, Washington Avenue, and Ocean Drive.

The systematized data collection method used and count locations now offer a baseline for future bicycle counts in the City that can monitor behavior and activity trends. Use of such counts will provide insight into how improved facilities affect use patterns.

### Miami-Dade MPO Bicycle and Pedestrian Injuries and Fatalities (2008)

Summary: A graph displaying reported countywide injury and fatality numbers from 1990 - 2008.

**Analysis:** While this MPO document does not break out the crash trend lines in Miami Beach, the county as a whole is becoming a safer place to walk and bicycle. Bike crashes did increase slight over 2007, but fatalities continued to decline, and are now at an all-time low.

Miami-Dade MPO Bikeway Map (2008)



**Summary:** A map displaying all existing bicycle paths, trails, lanes, wide curb lanes and shoulders intended for bicycle use, as well as those under construction.

**Analysis:** The map displays a range of bikeway facilities and routes across Miami-Dade County. The map does not include several new bikeways constructed in Miami Beach since 2008, including the now approved use of sharrows, which can now be found on several Miami Beach streets. Overall, the map is relatively rough and displays a small and discontinuous regional bikeway system.

### Miami Beach Atlantic Greenway Master Plan (2008)

**Summary:** Adopted in December of 2008, the Atlantic Greenway Master Plan (AGN) is the guiding planning documenting for the development of bicycle facilities in Miami Beach. This existing planning effort is an update of the AGN Plan.

The AGN Plan includes an inventory of all existing conditions in the City; provided an analysis of the conditions found; created a master plan of bikeway improvements; and outlines an implementation plan.

Analysis: In 2012, Atkins Global was asked to review the strengths and weaknesses of the existing AGN Plan. The strengths of the AGN Plan include the level of existing conditions collection and analysis work. Indeed, the Plan paints a clear picture of the opportunities and need to create a complete and connected citywide bikeway system. However, the AGN Plan fell noticeably short on a lot of best practice measures. The Atkins memo covers many of these, the a lack of accepted bikeway and intersection treatment facilities; lack of integration with other existing transit options; lack of meaningful public participation; and adding a project feasibility analysis are but a few elements that should be included in the AGN Plan Update.

### Miami Beach - West Avenue/Bay Road Basis of Design Report (2007)

*Summary:* This Basis of Design Report (BODR) provides conceptual design plans for permanent right-of-way and infrastructure improvements along West Avenue and Bay Road. The western limits of the study area are Biscayne Bay, the eastern limits Alton Road. The southern limits of the study area are 5<sup>th</sup> Street, the northern limits are 17<sup>th</sup> Street. The improvements outlined in the BODR are the result of significant and ongoing input from the City's technical staff, Program Manager, Flamingo Park residents and the consultant team. GO Bond neighborhood projects utilizing the BODR process include: streetscape, bicycle and pedestrian improvements, traffic calming, stormwater upgrades, water and sewer upgrades and street resurfacing.

**Analysis:** The significant infrastructure improvements outlined in the 16<sup>th</sup> Street BODR have yet to be fully realized. However, 5' bicycle lanes along 16<sup>th</sup> Street have been striped and will remain when the street is ultimately reconstructed with additional streetscape and infrastructure improvements. Of particular relevance to the AGN Update Plan is the BODR's inclusion of bicycle lanes along West Avenue. As designed, these new lanes will stretch from



just north of 6<sup>th</sup> Street to Dade Boulevard (inclusive of a new bridge spanning the Collins Canal. In order to fully connect to 5<sup>th</sup> Street, the AGN Update Plan may look to include sharrows between 5<sup>th</sup> street and the start/end of the bicycle lanes. While not included in the BODR, but relevant to the importance of the West Avenue bicycle lanes is that will ultimately serve as the north-south alternative to Alton Road. Additional east-west connections will also be made between the West Avenue neighborhood and Flamingo Park.

### Miami-Dade MPO: Parks Master Plan (2007)

**Summary:** A 50-year master plan encompassing the full extent of the County's public realm: greenways, streets, natural areas, parks, cultural areas, and waterway trails.

Analysis: Related to bicycling, a primary recommendation is to create network of "Great Streets" by retrofitting the County's existing oversupply of wide, auto-centric arterial and collector roadways. Clearly, Miami-Dade County and the City of Miami Beach must work with FDOT "to move beyond vehicular performance based street design and instead design streets that are defined by their role in the community." In bringing this point to light, the Plan underscores the importance for all residents to have immediate access to bicycling facilities: for recreation, health and utility.

### Miami-Dade MPO: Bicycle Crash Data – 2005-2007

Summary: A map displaying reported crash data for 2005, 2006, and 2007.

**Analysis:** Miami Beach bicycle crashes are concentrated in South and North Beach, areas where bicycle activity is higher than in Mid Beach. The map reveals that a vast majority of crashes are occurring at intersections, especially along the FDOT and County roads where motor vehicle speeds are the highest and the street design the least hospitable to people walking or bicycling.

Crashes are likely underreported, as is the case in most official pedestrian or bicycle crash statistics. Bicycle crashes in particular, tend to be minor and caused by the bicyclist, and therefore are often not reported. However, when and where bicycles crashes occur with motor vehicles, there is an increased risk of serious injury or death. In general the general trend line shows a diminishing number of crashes in the city. Instituting a more robust online crash mapping and analysis program, such as <a href="www.crashstat.org">www.crashstat.org</a>, would help provide more reliable data and offer clear areas to direct limited dollars for safety improvements.

### Miami Beach - 16<sup>th</sup> Street Phase I Basis of Design Report (2007)

**Summary:** This Basis of Design Report (BODR) provides conceptual design plans for permanent right-of-way and infrastructure improvements along 16<sup>th</sup> Street, from Bay Road to Collins Avenue. The improvements outlined in the BODR are the result of significant and ongoing input from the City's technical staff, Program Manager, Flamingo Park residents and the consultant team. GO Bond neighborhood projects utilizing the BODR process include: streetscape, bicycle



and pedestrian improvements, traffic calming, stormwater upgrades, water and sewer upgrades and street resurfacing.

Analysis: The significant infrastructure improvements outlined in the 16<sup>th</sup> Street BODR have yet to be realized, save for the striping of 5' bicycle lanes. While the bicycle lanes are well used and serve as an important east-west connector running parallel to Lincoln Road, there remain operational challenges for bicyclists at intersections. Additionally, people driving frequently double park, which forces bicyclists out into the vehicular lanes. The residents of Flamingo Park continue to advocate for further changes to make the recommendations in the BODR more pedestrian and bicycle-friendly. To date, walking along 16<sup>th</sup> Street can still be challenging, as sidewalks are narrow, private landscaping encroaches on the sidewalk, and street signs and street light posts further reduce the effective width of the sidewalk. These concerns are legitimate and should be removed so that bicycling and walking are as safe and inviting as possible.

### Miami-Dade MPO Bicycle Safety Plan (2006)

*Summary:* This plan is built from crash data analysis (GIS, 1996-2002), and illuminates possible safety countermeasures, which include education, enforcement, and engineering/design methods.

**Analysis:** In general, the bicycle crash trend line is decreasing throughout the whole county. As it relates to Miami Beach, the largest clusters of accidents were occurring in the neighborhoods of South Beach and North Beach (high density neighborhoods with high levels of bicycle ridership, but few bicycle facilities). Particular concentrations are found along FDOT and County roads where multiple vehicle lanes and higher traffic volumes/vehicular speeds create more hostile conditions for people bicycling or walking.

Physical engineering recommendations include bicycle lanes, traffic calming measures, and experimental treatments like shared lane use markings (sharrows) and bicycle boxes. The former two are methods are found throughout city, but bicycle boxes have not been used at all in Miami Beach or within Miami-Dade County. Additionally, developing bicycle boulevards or "neighborhood greenways" are nationally recognized as an excellent way to simultaneously calm traffic and create bicycle routes along primarily residential streets. This type of street retrofit has been studied by the County and may be a feasible option for particular areas in the City of Miami Beach, including streets that run parallel to major corridors with high crash rates. Educating City Commissioners and other city/county agencies will help decision makers prioritize these relatively inexpensive safety and quality of life improvements.

### Miami MPO Crash Data (2000 – 2006)

**Summary:** A recording of all traffic (motor vehicle, pedestrian and bicycle) injuries and fatalities. General trend is that there are fewer crashes throughout the County.



**Analysis:** The trends bode well, but there are still about the same number of bicyclist fatalities overall, despite the decrease in accidents. In general, those neighborhoods with higher ridership levels experience higher crash rates, which is to be expected and not necessarily an indication of other neighborhoods being safer for bicycling.

### Miami-Dade MPO Long Range Transportation 2030 Plan (2004)

**Summary:** The 25-year planning and policy document for Miami-Dade County transportation. Updated every five years, the plan includes investment priority for all modes of travel, including freight.

Analysis: The plan still places a primary emphasis on pure mobility and not accessibility. As it relates to bicycles, the plan calls for expanding bicycles lanes and greenways, many of which were identified in previous studies. The plan doesn't assign specific funding stream or priority to any of the proposed projects.

### Miami – Dade MPO: Bikeway Priority Feasibility and Evaluation Study (2003)

**Summary:** A study that put forth seven high priority projects in need of evaluation and prioritization. Of the identified projects, none were in Miami Beach.

**Analysis:** Because the priority projects were not located in Miami Beach, there is no analysis to be completed.

### Miami Beach - Nautilus Neighborhood Basis of Design Report (2002)

**Summary:** A Basis of Design Report (BODR) provides conceptual design plans for permanent right-of-way and infrastructure improvements. The improvements outlined in the Nautilus BODR are the result of significant input from the City's technical staff, Program Manager, residents of Nautilus and the consultant team. GO Bond neighborhood projects utilizing the BODR process include: streetscape, traffic calming, bicycle and pedestrian improvements, stormwater upgrades, water and sewer upgrades and street resurfacing.

Analysis: Significant infrastructure improvements have been made in the Nautilus neighborhood since the BODR was approved in 2002. As it relates to bicycling, the report called fore a designated 4' wide bicycle lane along 47th Street, from Pine Tree Drive to Prairie Avenue, and on Prairie Avenue from 47<sup>th</sup> Street south to 41st Street (Arthur Godfrey Road). Additional bicycle lanes and shared use lane markings have also further improved bicycle mobility in the neighborhood. Neighborhood streets were also narrowed intersection radii reduced to 15', which effectively reduces the speed of motor vehicles and makes bicycling and walking more comfortable.

Miami-Dade MPO: Bicycle Facilities Plan (2001)



**Summary:** A comprehensive bicycle facility plan for Miami-Dade County. The plan uses quantitative analysis tools (Bicycle Level of Service) to determine the conditions and suitability of the existing arterial and collector thoroughfare network for bicycling. Of the 1,500 roadway miles analyzed, only 8.6 percent of roadway miles were at an acceptable level of service for bicycling (score of "C" or better). Moreover, over 90 percent of the roadway miles received an unacceptable LOS score of "D" or worse, with approximately 58 percent of all segments receiving an LOS score of "E" and 5.7 percent a LOS of "F" rating. Almost the entire network identified in Miami Beach received a "D" or an "F." As of 2001, The County had less than 12 miles of on-road bicycle lanes that met FDOT criteria, and only recently began implementing more bicycle facility/lane miles.

**Analysis:** The plan is a robust quantitative survey of existing conditions within the County's bicycle network, but says nothing about the actual qualitative experience. It also ignores the role of land use and urban form in determining the relative bike-friendliness of a thoroughfare. Developed more than 10-years ago, it's time for this plan to be updated with new information and best practices.

### Miami-Dade MPO: LRTP 2025 Bike Suitability Study (2001)

Review: This map depicts those streets suitable for bikeway network facilities in 2001.

**Analysis:** This countywide bikeway network only includes major arterial and collector streets. While such streets link major destinations across long distances, it ignores neighborhood routes as part of the County's network. Most streets in the county were deemed unsuitable for bicycling.

### Miami-Dade MPO: Bicycle Facilities Plan (1997)

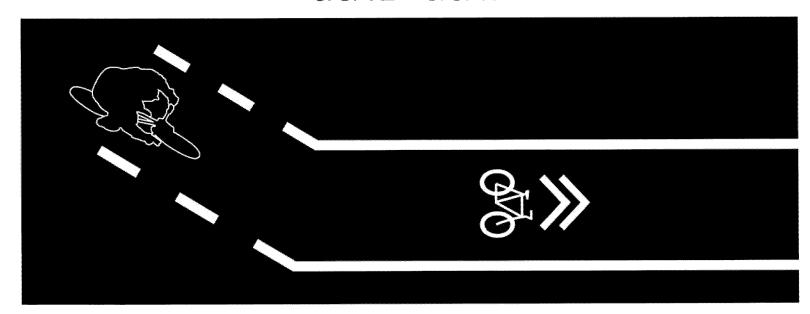
**Summary:** In the early 1990s, the Intermodal Surface Transportation Efficiency Act (ISTEA) and Clean Air Act (CAA) gave incentives to MPOs for promoting the expansion of bicycle facilities. This resulted in a renewed interest in bicycling, which spurred the creation of many plans, such as the Miami-Dade 1997 Bicycle Facilities Plan.

Analysis: The 1997 plan was largely a physical needs-based document used to determine future routes, infrastructure needs, and the existing conditions for bicycling within the County, including the City of Miami Beach. The latter was done using a quantitative and objective Roadway Condition Index (RCI). The index found that more than 60% of roadways were unsuitable for safe bicycling in the County. Interestingly, a similar LOS analysis in 2001 indicated that 90% of roadways were unsuitable for such use. The RCI and the subsequent LOS metrics, while intended to correctly identity unsafe conditions and promote bicycle-friendly streets, often do the opposite. For example, as the plan mentions, the RCI promoted wide curb lanes and turn lanes for "more automobile capacity." This directly conflicts with the same RCI notion that lower ADT equals a more bike-friendly street.

Attachment C

# The Handlebar Survey - Miami Beach -

An Assessment of Bicycling Conditions for: The Atlantic Greenway Network Plan Update Miami Beach, Florida 6/5/12 - 6/9/12









South Beach includes a dense residential and mixed-use urban fabric connected by a network of walkable streets. Along with the flat terrain and beach culture, it's a perfect recipe for bicycle-friendliness.

### **SUMMARY**

The South Beach Handlebar Survey ride was conducted on June 5th - 9th, 2012 by The Street Plans Collaborative. The Survey included the June 9th Miami Beach Community Bicycle Ride, which attracted more than 50 participants.

The Handlebar Survey gathered qualitative and quantitative information regarding existing bicycling conditions. Information collected during the survey process includes, but is not limited to:

- Current bicycle demand
- The level of comfort and perceived safety felt while bicycling a wide variety of streets
- Existing street widths, types, and characteristics
- Bicycle network gaps
- Presence of signalized intersections
- Posted and actual vehicular speeds
- Land use characteristics
- · Local and regional open space connections
- Public transportation options/bicycle integration

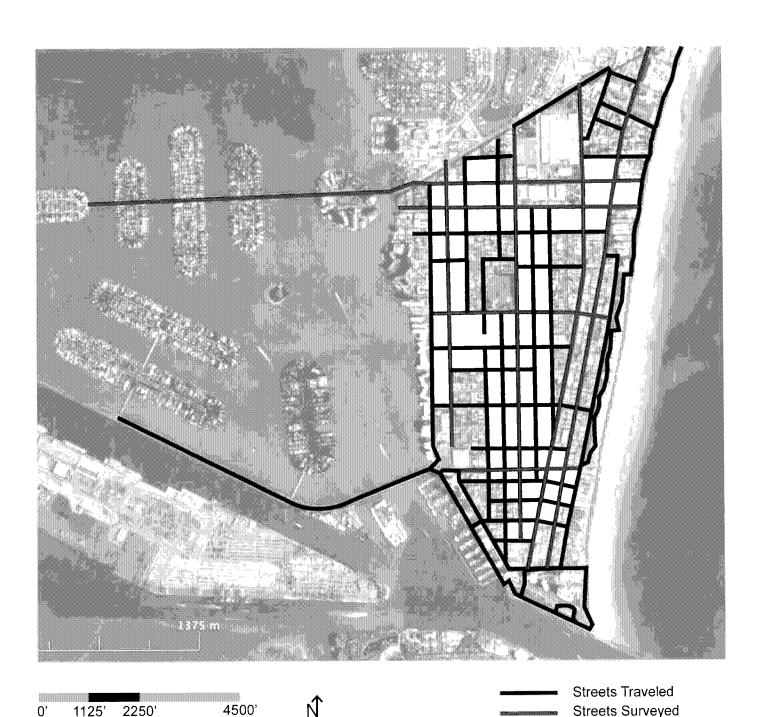
- Bicycle parking supply/demand
- · Bicycle parking type, location, and quality
- Bicycle trip generators
- · Existing bikeway infrastructure
- Interactions between all street users
- Safe/unsafe routes
- · Wayfinding amenities

Handlebar Survey ride route maps, survey sheets, and a small collection of images representing various conditions found in the field are found herein. While a majority of the streets were covered in each neighborhood, only select "arterial" and "collector" streets went through the formal survey analysis process. Such thoroughfares typically contain land uses that generate the most bicycle trips, but are also known to be the most uncomfortable for bicycling. Based on the information collected, each of these streets are given an average "cycling experience" score. While not comprehensive, the Handlebar Survey certainly provides a representational snapshot of cycling in South Beach.

# The Land Char Survey - South Beach -



# The Land Char Survey - Streets Surveyed -



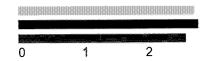
Existing Conditions 🙈	Yes	No	N/A	Collins Ave. Notes
Survey limits: South Pointe Drive to 23rd Street Jurisdiction: Florida Department of Transportation.				
LAND USE				
Context: Urban	•			Dense mix of land uses.
Context: Suburban	-	•		
Commercial (retail, offices, etc.) uses		•		Mostly south of Espanola Way
Residential uses	•			Especially south of Fifth Street
Industrial uses	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	•		
Vertical Mixed-use				
Horizontal Mixed-use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Many destinations
PUBLIC REALM			1	
Are there continuous sidewalks?	•		_	Quite narrow
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?		•		Especially south of Espanola Way
Are there street trees and/or attractive plantings?	•	•		Varies
Do adjacent buildings form a consistent street wall?	•	•		Varies
Are there many parking lots and/or driveway curb cuts?	•			Too many north of Espanola Way
Are there quality street furnishings and amenities?	•			Yes, where they fit on the sidewalk
Is there direct access to local/regional open space?	•			Lummus/Collins Park, Beach Wall
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET				
Is on-street parking available?	•			South of Espanola Way
Are there more than two lanes for through traffic?	•	1		North of Espanola Way
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			North of Espanola Way
Is the speed limit posted consistently?	•			
Is there vehicular congestion during peak travel hours?	•	-	****	Off peak too, south of Espanola
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?	•			Mostly, a few still missing
Is the pavement in a good state of repair?	•			For the most part
Are there consistent conflict points between modes?	•			Bus stops are a challenge
Is bus or rail transit available?	•		1	Bus
If yes, does it adequately accommodate bicyclists?		•		Buses have bike racks; bus stops present challenges to cyclists.
BICYCLE INFRASTRUCTURE			f.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Bicycle facilities (Sharrrows, lanes, paths etc.)?	ľ	•		
Quality, accessible bicycle racks (U-racks,etc.)?	<b> </b>	•		A few, more are needed
DecoBike Station(s)?	*			2nd Street, several located nearb along intesecting streets
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?		•		

## Collins Avenue Cycling Experience

FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :    = Disagree	1	2	3	4
. I felt visible, safe, and comfortable while cycling on this street/in this area:		• .		
Notes: The Collins corridor is more comfortable south of Espanola, where there are only two lanes. However, the corridor is still not comfortable for cycling due to vehicular congestion and the lack of bikeway and bicycle parking facilities.				
2. The existing roadway conditions are amenable to cycling:		•		
Notes: At most times of the day, the lack of bicycle facilities make it difficult for even the experienced bicyclist to feel comfortable cycling along this corridor.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•	
Notes: The majority of people driving passed at a safe distance. However, there were still examples of drivers buzzing too close. This occurred more frequently north of Espanola Way, where there are four anes of moving traffic.	***************************************			
The speed differential between myself and passing motorists was acceptable:			•	
Notes: The speed differential is much more comfortable south of Espanola Way, where the street is only two lanes with wide parking lanes that allow some space between the parked cars and moving vehicles. This part of the corridor is more congested, which effectively lowers travel speeds.		***************************************	***************************************	***************************************
5. I was able to locate high-quality bicycle parking easily:	•			
Notes: There is very little available bicycle parking along the corridor. Most bicyclists lock up to street signs. This present a particular challenge to pedestrians south of Espanola Way, which is where the sidewalks narrow considerably.				***************************************
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: The whole corridor is full of bars, restaurants, hotels, shops and other amenities that should be made fully accessible to people bicycling.	***************************************		***************************************	
7. The area could become much more friendly to cyclists of all abilities:				
Notes: More bicycle parking, law enforcement, fewer curb cuts/driveways, and the managing of slower speeds north of Espanola Way are but a few improvements that could enhance cycling within the Collins Avenue corridor in South Beach.	***************************************			***************************************

Street Score: 2.7

Average North Beach Street Score: 2.75



Existing Conditions &	Yes	No N	/A 5th Street Notes
Survey limits: Ocean Drive to Alton Road  Jurisdiction: Florida Department of Transportation		***************************************	
LAND USE			
Context: Urban	•		
Context: Suburban		•	
Commercial (retail, offices, etc.) uses	•		
Residential uses	•		Some upper level apartments
Industrial uses		•	There are gas stations
Vertical Mixed-use	•		
Horizontal Mixed-use		•	
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•		Bike shop, pharmacy, restaurants
PUBLIC REALM			
Are there continuous sidewalks?	•		
If yes, on both sides of the roadway?	•		
Are the sidewalks an adequate width and condition?			
Are there street trees and/or attractive plantings?	•		
Do adjacent buildings form a consistent street wall?	•		Except for gas stations
Are there many parking lots and/or driveway curb cuts?	.,	•	Except for gas stations
Are there quality street furnishings and amenities?	•		
Is there direct access to local/regional open space?	•		Eastern terminus is Lummus Park
Are there plazas, pocket parks, playgrounds, etc.?		•	
THE STREET			
Is on-street parking available?		•	
Are there more than two lanes for through traffic?		•	
If yes, are the rightmost travel lanes wider?		•	
Are there consistent signalized intersections?	•	-	
Are there consistent turning lanes?	•		
Is the speed limit posted consistently?	•		
Is there vehicular congestion during peak travel hours?	•		
Are there curbs and gutters?	••••••		
Are there well-marked crosswalks at every intersection?	•		Not all, but close
Is the pavement in a good state of repair?	•		
Are there consistent conflict points between modes?		•	Bus stop/bike lane interaction tough
Is bus or rail transit available?	•		Bus
If yes, does it adequately accommodate bicyclists?	•		Bus racks, bike lane design could be better to minimize conflict
BICYCLE INFRASTRUCTURE		1.	
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•		Conventional curbside bike lanes
Quality, accessible bicycle racks (U-racks, etc.)?	•	•	Varies,
DecoBike Station(s)?	•		Lummus Park, several located nearby along intesecting streets
Consistent bicycle route/wayfinding signs?	•	•	Signs, but no wayfinding
Intersection treatments (Bike boxes, priority signals)?	•**************************************	1 •	

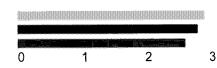
## 5th Street Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING:	1	2	2	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		2	3	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:			•	
Notes: The bicycle lane along 5th Street aids the visibility and predictability of those cycling in the corridor. Turning movements from the bike lanes to points north and south still remains a challenge, and motor vehicle speeds are intimidating when traffic is flowing more freely.				
2. The existing roadway conditions are amenable to cycling:			•	
Notes: The newly re-surfaced street and added bike lanes help make 5th Street more amenable to cycling.		000000000000000000000000000000000000000	WWW.WWW.WWW.WWW.WWW.WWW.WWW.WWW.WWW.WW	
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•	
Notes: The presence of bicycle lanes seem to keep overtaking vehicles at a safe distance.			***************************************	
4. The speed differential between myself and passing motorists was acceptable:		•		
Notes: Unless there is congestion, motor vehicles tend to speed through this corridor, thereby diminishing the comfort of those who are walking or bicycling.			\$0000000000000000000000000000000000000	
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: There are two types of bicycle racks in this corridor: the inverted u-rack, and the 'mustache' rack. The u-rack is preferred by those who cycle, while the intended use of the "mustache rack" is confusing and does not support the bicycle frame in two places - a pre-requisite for bike rack choice.	***************************************			
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: There are plenty of destinations along the corridor, including a bike shop, pharmacy, grocery store, retail, offices, and restaurants that make the 5th Street corridor an important one for bicycling.				
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Wayfinding and proper intersection treatments would go a long way to making 5th Street an easier street to bicycle along. Specifically, a bicycle median crossing at Euclid and 5th would help facilitate bicycle movement between two neighborhooods. This will be increasingly important as Euclide Avenue bicycle lane is completed.				

Street Score: 2.85

Average North Beach Street Score: 2.75



Existing Conditions &	Yes	No	N/A	11th Street Notes
Survey limits: Ocean Drive to West Avenue				
Jurisdiction: Miami-Dade County				
LAND USE			,	
Context: Urban	•			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses				West, Alton, Washington Avenue
Residential uses	•			
Industrial uses		•		
Vertical Mixed-use	•			Along commercial corridors
Horizontal Mixed-use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Flamingo Park, retail corridors
PUBLIC REALM				
Are there continuous sidewalks?				
If yes, on both sides of the roadway?	•	-		
Are the sidewalks an adequate width and condition?		•		
Are there street trees and/or attractive plantings?	•	•		Varies
Do adjacent buildings form a consistent street wall?	•			
Are there many parking lots and/or driveway curb cuts?		•		
Are there quality street furnishings and amenities?	•	•		Varies
Is there direct access to local/regional open space?	•			Flamingo Park, Lummus Park
Are there plazas, pocket parks, playgrounds, etc.?		•	<u> </u>	
THE STREET				
ls on-street parking available?	•			
Are there more than two lanes for through traffic?		•		
If yes, are the rightmost travel lanes wider?		<b>†</b>	•	
Are there consistent signalized intersections?	•	<b>+</b>		Alton, Meridian, Washington, Collins
Are there consistent turning lanes?		•		
Is the speed limit posted consistently?		•		
Is there vehicular congestion during peak travel hours?		•		
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?	•			At most, but not all
Is the pavement in a good state of repair?	•	<b>-</b>		
Are there consistent conflict points between modes?		•		
Is bus or rail transit available?		•		At intersecting commercial corridors
If yes, does it adequately accommodate bicyclists?		•		Bus racks
BICYCLE INFRASTRUCTURE				
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks, etc.)?		•		Very few racks, 1 DecoBike Station
	•			11th @ Flamingo Park, 11th @
DecoBike Station(s)?			•	Miami Beach Police headquarters
Consistent bicycle route/wayfinding signs?		•	*****	
Intersection treatments (Bike boxes, priority signals)?		•		

## 11th Street Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1_	2	2	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		Z	<del>ا</del>	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:			•	
Notes: Traffic volumes are low enough during off-peak hours (most of the day) and speeds managed so that an intermediate to skilled cyclist can feel relatively comfortable cycling the corridor.			***************************************	***************************************
2. The existing roadway conditions are amenable to cycling:			•	
Notes: Short blocks, traffic lights, and flat terrain make the street tolerable, although improvements can still be made.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•	
Notes: Mostly okay, although some vehicles cut it a bit too close.				
4. The speed differential between myself and passing motorists was acceptable:			•	
Notes: Generally had few problems with motorists speeding by, although if people driving hit the light cycles during all green phases, then speed differential may be an issue for most intermediate and novice cyclists.				
5. I was able to locate high-quality bicycle parking easily:	•			
Notes: Save for a bank of racks in front of the 11th Street Diner on Washington, bicycle parking is very difficult to find in this corridor. The narrow sidewalks limit the amount of parking to be provided, unless space from motor vehicle parking were to be transitioned to bicycle parking, ala DecoBike stations.				
6. There are numerous destinations along the corridor or in this area to which people could bicycle:			•	
Notes: There are plenty of destinations along the corridor, including Lummus Park, shops along Collins and Washington, Flamingo Park, and the shops of Alton and West Avenues.				***************************************
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Wayfinding, sharrows, and enhanced bicycle intersection treatments would help make 11th Street easier for cycling.	***************************************			***************************************

Street Score: 2.7

Average North Beach Street Score: 2.75 Average Miami Beach Score: 2.5 0 1 2

Existing Conditions &	Yes	No	N/A	Alton Road Notes
Survey limits: South Pointe Drive to Dade Boulevard				
Jurisdiction: Florida Department of Transportation		·		
LAND USE				
Context: Urban	•			Demonstrates urban characteristics
Context: Suburban	•			Also has suburban characteristics
Commercial (retail, offices, etc.) uses	•			
Residential uses	•			Commercial, but some residential
Industrial uses	••••			
Vertical Mixed-use	•			A few examples
Horizontal Mixed-use	•	***************************************	evc	
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	.*			Retail, incl. grocery, and restaurants
PUBLIC REALM				
Are there continuous sidewalks?				
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•	•		Varies
Are there street trees and/or attractive plantings?		•		
Do adjacent buildings form a consistent street wall?	•	•		Varies
Are there many parking lots and/or driveway curb cuts?	•			
Are there quality street furnishings and amenities?	•	•		Varies
Is there direct access to local/regional open space?	•			Bay Walk accessible south of 5th
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET				
Is on-street parking available?	•	•		Varies
Are there more than two lanes for through traffic?	•			
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			
Is the speed limit posted consistently?	•			
Is there vehicular congestion during peak travel hours?	•			
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?		•		Hinders pedestrian mobility
Is the pavement in a good state of repair?	•			
Are there consistent conflict points between modes?	•			RTOR, particularly tough for walking
Is bus or rail transit available?	•			
If yes, does it adequately accommodate bicyclists?	•	•		Bus racks, but corridor is hostile
BICYCLE INFRASTRUCTURE				
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		Sharrows to be included when the street is reconstructed
Quality, accessible bicycle racks (U-racks, etc.)?		•		Racks are scattered, more needed
DecoBike Station(s)?				Alton @ 1st (coming soon), 4th, 10th (coming soon),11th, 14th,15th, and16th (coming soon)
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?		•		

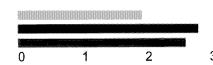
## Alton Road Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1_	2	3	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree			J	
1. I felt visible, safe, and comfortable while cycling on this street/in this area:	•			
Notes: Traffic volume, number of moving lanes, motor vehicle speed, lack of bicycle facilities, and the number of curb cuts/driveways make cycling very difficult along this corridor.				
2. The existing roadway conditions are amenable to cycling:	•			
Notes: No, they are not. See above.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:	<u></u>		•	
Notes: Motorists seemed surprised to see a bicyclist on Alton, so I found wide berth to be given more than expected.		***************************************		
4. The speed differential between myself and passing motorists was acceptable:				
Notes: Generally had few problems with motorists speeding by, although if people driving hit the light cycles during all green phases, then speed differential may be an issue for most intermediate and novice cyclists.		**************************************	***************************************	***************************************
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: The availability of bike parking along the corridor is inconsistent. Some high quality city-installed U-racks may be found closer to Lincoln Road, but otherwise there are few other opportunities to safely lock your bicycle.		AMALO COLOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC		***************************************
6. There are numerous destinations along the corridor or in this area to which people could bicycle:		•		
Notes: The corridor does have many destinations, but the character of the roadway makes cycling very difficult, even for the most experienced rider. That being said, many people cycle from the intersecting streets and wind up walking the last block or so of their trip.		***************************************	***************************************	
7. The area could become much more friendly to cyclists of all abilities:		-		
Notes: Bike parking, dedicated bicycle facilities, intersection design treatments, managing speeds, lowering traffic volumes and the like would be pre-requisites.		***************************************		

Street Score: 1.9

Average North Beach Street Score: 2.75



Existing Conditions &	Yes	No	N/A	16th Street Notes
Survey limits: Collins Avenue to Biscayne Bay Jurisdiction: City of Miami Beach				
LAND USE		1		3
Context: Urban	•	-		
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			Near Alton and Washington/Collins
Residential uses	•			
Industrial uses		•		
Vertical Mixed-use	•			
Horizontal Mixed-use	.,	•		Small pocket at 16th/Lenox
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Bookended by retail destinations
PUBLIC REALM				
Are there continuous sidewalks?	٠			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?		•		Sidewalks are constrained
Are there street trees and/or attractive plantings?	•	•		Inconsistent
Do adjacent buildings form a consistent street wall?	•			
Are there many parking lots and/or driveway curb cuts?	***************************************	•		
Are there quality street furnishings and amenities?		•		2 DecoBike Stations
Is there direct access to local/regional open space?		•		
Are there plazas, pocket parks, playgrounds, etc.?		•	<u> </u>	
THE STREET				
Is on-street parking available?	•		***************************************	
Are there more than two lanes for through traffic?		•		
If yes, are the rightmost travel lanes wider?			•	4
Are there consistent signalized intersections?	•			Alton, Michigan, Meridian, Drexel, Washington
Are there consistent turning lanes?		•		
Is the speed limit posted consistently?	•			
Is there vehicular congestion during peak travel hours?		•		
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?	•			Except east side of Lenox
Is the pavement in a good state of repair?	•	İ		Not awful
Are there consistent conflict points between modes?	•	1		Vehicles turning across bike lane
Is bus or rail transit available?		•		Only at Washington/Alton
If yes, does it adequately accommodate bicyclists?	••••	•	•	
BICYCLE INFRASTRUCTURE		-		
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•		777	Conventional bike lanes, Washington Avenue to Bay Road
Quality, accessible bicycle racks (U-racks, etc.)?		•		No racks
DecoBike Station(s)?	:			16th @ Washington (coming soon) Michigan, Alton (coming soon), Bar
Consistent bicycle route/wayfinding signs?		•		Needed
Intersection treatments (Bike boxes, priority signals)?	***************************************	•		Would be useful in select places

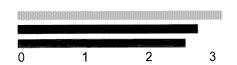
## 16th Street Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1	2	2	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		_	J	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:			•	
Notes: Motor vehicle turning movements at intersections presented an occasional threat, as motorists did not yield as often as they should. Additionally,				
2. The existing roadway conditions are amenable to cycling:			•	
Notes: Flat terrain, bicycle lanes, and relatively low speeds make the street fairly friendly to cycling.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:				•
Notes: Bicycle lanes help lateral spacing between passing motorists and bicyclists.				
4. The speed differential between myself and passing motorists was acceptable:				•
Notes: Signalized intersections, only two lanes of traffic, and general land use characteristics helped keep speeds comfortable for an intermediate to expert cyclist.	***************************************	***************************************		***************************************
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: None along the residential portion of the corridor; some at the commercial nodes at Washington and Alton Road.	***************************************		***************************************	
6. There are numerous destinations along the corridor or in this area to which people could bicycle:	_		•	
Notes: 16th Street is bracketed by two nodes of commercial activity at Washington Avenue and Alton Road. The existing bicycle lane facilitates movement between the two, and offers a parallel route to Lincoln Road, which is full of restaurant, retail, and cultural destinations.	***************************************		***************************************	
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Turning conflicts could be managed, and the presence of cyclists made to be more visible at intersections. The eastbound transition of the bicycle lane at 16th/Washington Avenue, or the lack thereof, needs to be addressed.			***************************************	

Street Score: 3:15

Average North Beach Street Score: 2.75



Existing Conditions &	Yes	No	N/A	Wash. Ave. Notes
Survey limits: Inlet Boulevard to Dade Boulevard Jurisdiction: Florida Department of Transportation				
LAND USE				
Context: Urban	•			
Context: Suburban	***************************************	•		
Commercial (retail, offices, etc.) uses	•			
Residential uses	•			
Industrial uses	•			
Mixed-use	•			
Horizontal Mixed use	•		ļ	Many blocks have 1-story buildings
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•		Į	Jp and down the whole corridor
PUBLIC REALM				
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•	•	[	Depends on the corridor location
Are there street trees and/or attractive plantings?	•			
Do adjacent buildings form a consistent street wall?	•			
Are there many parking lots and/or driveway curb cuts?		•		
Are there quality street furnishings and amenities?	•	•		Varies
Is there direct access to local/regional open space?	•		;	South Pointe and Soundscape Parks
Are there plazas, pocket parks, playgrounds, etc.?		•		A few, but not many
THE STREET				
Is on-street parking available?	•			
Are there more than two lanes for through traffic?	•			Four lanes, plus turn lanes
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			
Is the speed limit posted consistently?	•			
Is there vehicular congestion during peak travel hours?	•			
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?	•			A couple remain unmarked
Is the pavement in a good state of repair?	•	1		
Are there consistent conflict points between modes?		•		
Is bus or rail transit available?	•			MDT Bus
If yes, does it adequately accommodate bicyclists?	•		•	
BICYCLE INFRASTRUCTURE				
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•			Sharrows,South Pointe to Dade Blvd
Quality, accessible bicycle racks (U-racks, etc.)?	•			More are needed
DecoBike Station(s)?	*			Washington @ Inlet Blvd (coming soon), 1st (coming soon), 3rd (coming soon), 7th, 9th, 11th, 13th, 15th, 16th (coming soon), 17th, 20th
Consistent bicycle route/wayfinding signs?		•		Sharrow signs, but no wayfinding
Intersection treatments (Bike boxes, priority signals)?		•		

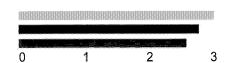
## Wash. Ave. Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1	2	3	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		_	3	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:	***************************************		•	
Notes: Volume of traffic and the number of lanes is likely intimidating to some intermediate and all novice, less risk-averse cyclists.				***************************************
2. The existing roadway conditions are amenable to cycling:			•	
Notes: Pavement is in good condition, few curb cuts, flat etc. But again, volume of traffic and number of lanes can be intimidating.		000000000000000000000000000000000000000	00000000000000000000000000000000000000	***************************************
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:		•		
Notes: This really varied throughout the experience of cycling up and down the corridor.	**************************************	***************************************		***************************************
4. The speed differential between myself and passing motorists was acceptable:			•	
Notes: It varies best on the level of congestion. With less traffic, cars move much faster between green signal phases.				
5. I was able to locate high-quality bicycle parking easily:			•	
Notes: Generally true, but not always available. More is needed throughout the corridor.				
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: Besides Lincoln Road, this is likely one of the most active and frequently used corridors due to the destinations serving both locals who cycle for utility, commuting etc. and visitors. In particular, the dining, retail, civic, and recreational opportunities (Soundscape Park) serve as key attractions.				
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Managing speeds, reducing congestion, enhancing intersection treatments and adding more bicycle parking would enhance the Washington Avenue corridor for cycling.	**************************************	<b></b>		

Street Score: 3.15

Average North Beach Street Score: 2.75



<b>Existing Conditions</b>	Yes	No	N/A	Meridian Ave. Notes
Survey limits: Meridian Avenue to Dade Boulevard Jurisdiction: Miami-Dade County				
LAND USE			1.	
Context: Urban	•			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			At Lincoln Road, 5th Street
Residential uses	•			Mostly residential
Industrial uses		•		
Vertical Mixed-use	•			
Horizontal Mixed use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Flamingo Park, Lincoln Road etc.
PUBLIC REALM		Į.		3
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•	•		It varies along the corridor
Are there street trees and/or attractive plantings?	•			Especially between 6th and 15th
Do adjacent buildings form a consistent street wall?	•			
Are there many parking lots and/or driveway curb cuts?	•	•		Varies, some front-loaded parking
Are there quality street furnishings and amenities?	•			Shade trees are the most important
Is there direct access to local/regional open space?	•			
Are there plazas, pocket parks, playgrounds, etc.?	•			Flamingo Park, Holocaust Memorial
THE STREET		*		
Is on-street parking available?	•			
Are there more than two lanes for through traffic?		•		
If yes, are the rightmost travel lanes wider?			•	
Are there consistent signalized intersections?	•			5th, 11th, 15th, Lincoln Road, 17th
Are there consistent turning lanes?		•		
Is the speed limit posted consistently?		•		
Is there vehicular congestion during peak travel hours?		•		
Are there curbs and gutters?	•			×
Are there well-marked crosswalks at every intersection?	•			
Is the pavement in a good state of repair?	•			Segment recently resurfaced
Are there consistent conflict points between modes?		•		
Is bus or rail transit available?		•		
If yes, does it adequately accommodate bicyclists?			•	
BICYCLE INFRASTRUCTURE				
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks, etc.)?		•		
DecoBike Station(s)?	•			Meridian @ 6th, 9th (coming soon),13th, and 17th
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?		•		

## Meridian Ave. Cycling Experience



	RIDE, PLEASE INDICATE HO 2 = I Somewhat Disagree	OW YOU FEEL ABOUT THE F 3 = I Somewhat Agree	FOLLOWING : 4 = I Agree	1	2	3	4
1. I felt visible, safe, a	nd comfortable while cycling o	n this street/in this area:				•	
Notes: The lack of bicycle facilities is likely intimidating to some intermediate and all novice, less risk-averse cyclists. Motorists do pass closely, and one must be mindful of the doors of parallel parked cars.							
2. The existing roadwa			•				
Notes: Slower speeds pleasant cycling enviro	(mostly) only two lanes of mo onment.	ving traffic, excellent tree can	opy all contribute to a				***************************************
3. Motorists, including	MDT bus drivers, consistently	gave me at least 3 ft. when p	passing:		•		
	sts often pass too closely.						
4. The speed different			•				
Notes: Speed is relative	vely managed, but lower spee	ds still are preferable,					
5. I was able to locate	high-quality bicycle parking e	asily:			•		
Notes: As a mostly rest the activity nodes (6th parking is needed.	sidential corridor, the lack of or Street, Flamingo Park, block	n-street bicycle parking is not between 16th and Lincoln Ro	surprising. Still, at ad etc.), more bicycle				***************************************
6. There are numerou	s destinations along the corrid	dor or in this area to which peo	ople could bicycle:			•	
	ut than the City's commercial Street corridor, Flamingo Park,						
7. The area could bed	ome much more friendly to cy	clists of all abilities;				•	
Notes: Many cyclists ditional parking, and s	use the sidewalk along Meridia speed enforcement would help	an, especially along Flamingo o the corridor become more ar	Park. Wayfinding, ad- nenable to cycling.				

Street Score: 3.15

Average North Beach Street Score: 2.75



Existing Conditions 🙈	Yes	No	N/A	17th Street Notes
Survey limits: BeachWalk to Dade Boulevard Jurisdiction: Miami-Dade County				
AND USE				
Context: Urban	•	ì		
Context: Suburban	••••	•	<b></b>	
Commercial (retail, offices, etc.) uses	•		•	Mostly civic and residential uses
Residential uses	•			
ndustrial uses		•		
Vertical Mixed-use	•			Some
Horizontal Mixed use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			City Hall, Soundscape Park, Glea son Theatre, Beach Walk
PUBLIC REALM				
Are there continuous sidewalks?	•			
f yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?		•		It varies along the corridor
Are there street trees and/or attractive plantings?		•		Rarely
Do adjacent buildings form a consistent street wall?	•			Mostly
Are there many parking lots and/or driveway curb cuts?		•		
Are there quality street furnishings and amenities?	•	•		Varies
s there direct access to local/regional open space?	•			Soundscape Park, Beach Walk
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET				
s on-street parking available?		•		Only on the easternmost block
Are there more than two lanes for through traffic?	•			West of Washington
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			65050500
Is the speed limit posted consistently?	•			
Is there vehicular congestion during peak travel hours?				Mostly at Alton Road
Are there curbs and gutters?			***************************************	
Are there well-marked crosswalks at every intersection?	•			At most, but not all
Is the pavement in a good state of repair?	•			
Are there consistent conflict points between modes?	•			Bus/Bike, and RTOR pedestrians
Is bus or rail transit available?	•		1	Bus
If yes, does it adequately accommodate bicyclists?	•		<b>+</b>	Bus bike racks
BICYCLE INFRASTRUCTURE		<u> </u>		
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks, etc.)?	•		-	City Hall
wadity, accessible ployele racks (O-racks, etc.):	•	•		17th @ Collins (coming soon), Washington, Convention Center
DecoBike Station(s)?		***************************************		
DecoBike Station(s)?  Consistent bicycle route/wayfinding signs?		•		Drive, Meridian Avenue

## 17th Street Cycling Experience



FOLLOWING YOUR RIDI	OLLOWING:	1	2	3	1		
1 = I Disagree 2 = I	Somewhat Disagree	3 = I Somewhat Agree	4 = I Agree		4	<i>3</i>	4
<u> </u>	omfortable while cycling or				•		
	st, so the lack of bicycle fac e, less risk-averse cyclists.	cilities or other facilities is likel	y intimidating to most				***************************************
2. The existing roadway co	onditions are amenable to	cycling:			•		
because there seems to be at higher speeds. Finally,	e little congestion at the in	e) make cycling along 17th in tersections, save for Alton Ro tter pan and the outermost tra s.	ad, motorists travel				
3. Motorists, including MD	T bus drivers, consistently	gave me at least 3 ft. when p	assing:			•	
Notes: While some motori fic volumes, which affords distance.	sts did pass too closely, th motorists ample space to	e particular time of day can m move over a lane and pass w	nean lighter traf- with plenty of lateral		00000000000000000000000000000000000000		***************************************
4. The speed differential b	etween myself and passin	g motorists was acceptable:			•		
Notes: Motorists move pre	etty quickly along this corrid	dor when hitting the 'green wa	ave.'		***************************************	***************************************	
5. I was able to locate hig	h-quality bicycle parking ea	asily:			•		
Notes: This was difficult, to located on the intersecting		that most of the primary build	ding entrances are	777777777777777777777777777777777777777		WWW.0000000000000000000000000000000000	
6. There are numerous de	estinations along the corrid	lor or in this area to which peo	pple could bicycle:		•		
Notes: There are numeror more Miami Beach at Jac able for most users along	kie Gleason Theater, Beac	estinations, including Sounds chwalk, City Hall etc., but cycl	cape Park, The Fill- ing is not yet comfort-				
	e much more friendly to cy					ļ	•
Notes: There may be opp bicycle parking and wayfi		ad diet that would add bicyclin	g facilities, as well as		***************************************		***************************************

Street Score: 2.4

Average North Beach Street Score: 2.75



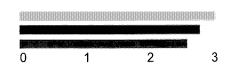
Existing Conditions &	Yes	No	N/A	Venetian Notes
Survey limits: Purdy Avenue to West San Marino Drive Jurisdiction: Miami-Dade County	,			
LAND USE			1	
Context: Urban	•			
Context: Suburban	•			
Commercial (retail, offices, etc.) uses		•		Mostly residential
Residential uses	•			
Industrial uses		•		
Vertical Mixed-use		•		Some
Horizontal Mixed use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Belle Isle Park, City of Miami link
PUBLIC REALM	4	,		·
Are there continuous sidewalks?	•			Under construction
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•			Under construction
Are there street trees and/or attractive plantings?		•		Varies
Do adjacent buildings form a consistent street wall?		•		
Are there many parking lots and/or driveway curb cuts?		•		
Are there quality street furnishings and amenities?	•	•		Varies, Under construction
Is there direct access to local/regional open space?	•			Belle Isle Park, Biscayne Bay
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET				J
Is on-street parking available?	•	•		In some locations
Are there more than two lanes for through traffic?		•	-	
If yes, are the rightmost travel lanes wider?		•	•	
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?			-	
Is the speed limit posted consistently?	•	+		
Is there vehicular congestion during peak travel hours?	•			Only when the drawbridge goes up
Are there curbs and gutters?	<b>-</b>	•		Varies
Are there well-marked crosswalks at every intersection?	•			Under construction, hard to tell
Is the pavement in a good state of repair?	•			Not where there is construction
Are there consistent conflict points between modes?		•		Very few
Is bus or rail transit available?	•			Bus
If yes, does it adequately accommodate bicyclists?	•		-	Bus bike racks
BICYCLE INFRASTRUCTURE				and the same
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•			Conventional Bicycle Lanes
	•			Belle Isle Park
Quality, accessible bicycle racks (U-racks, etc.)?  DecoBike Station(s)?	•			Belle Isle Park
Consistent bicycle route/wayfinding signs?	•			A few county signs marking route
Intersection treatments (Bike boxes, priority signals)?			-	7. Tow obanty signo marking route

## Venetian Cswy Cycling Experience

FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :							
1 = I Disagree 2 = I	Somewhat Disagree	3 = I Somewhat Agree	4 = I Agree		2	<b>ာ</b>	4
1. I felt visible, safe, and co	omfortable while cycling or	n this street/in this area:					•
		cling in this corridor, but based icycle in Miami/Miami Beach.	I on past experience				
2. The existing roadway co	nditions are amenable to	cycling;				•	
Notes: Not currently, but no few pinch points.	ormally yes. In the past the	e inconsistent bicycle lane de	sign/width provided a				
3. Motorists, including MD7	Tbus drivers, consistently	gave me at least 3 ft. when p	assing:				•
Notes: While some motoris ists to have ample space to	• • • • • • • • • • • • • • • • • • • •	eriods of lower traffic volumes	usually allow motor-	***************************************	***************************************		**************************************
4. The speed differential be	etween myself and passin	g motorists was acceptable:				•	
Notes: Construction definit opportunities for motorists		do drawbridge openings. Hov	vever, there are still	***************************************			VAAVAAAAAAAAA
5. I was able to locate high	-quality bicycle parking ea	asily:			•		
Notes: There are no bicycle Park.	e parking facilities along t	he Causeway, except for thos	e found in Belle Isle		***************************************	WWW.	***************************************
6. There are numerous des	stinations along the corrid	or or in this area to which pec	ple could bicycle:			•	
	nation for recreational act	es the corridor is mostly reside tivity, including cycling. It is als				***************************************	
7. The area could become	much more friendly to cy	clists of all abilities:				•	
		parking and wayfinding amen de Boulevard/17th Street is co				**************************************	***************************************

Street Score: 3.15

**Average North Beach Street Score: 2.75** Average Miami Beach Score: 2.5



Handlebar Survey Images - South Beach



The Miami Beach standard inverted U-rack provides a high quality and attractive short-term parking option for bicyclists. More of these racks are needed throughout the city, especially in South Beach.



DecoBike is one of the most successful bicycle sharing programs in the country. The City Hall DecoBike station is shown above.



Miami Beach Community Bike Ride participants set off down Washington Avenue.



The 16th Street bicycle lane, west of Alton Road. The use of dashed lines adjacent to the parking lot entrance marks a potential conflict point for motorists and cyclists.



Sharrows on Washington Avenue help guide bicyclists away from the opening doors of parked cars. They also indicate to motorists that the road is to be shared with bicyclists.



New bicycle lanes along 5th Street improve conditions for skilled bicyclists. However, the eastbound lane ends suddently at Lenox Street, and without indication for how cyclists should continue to navigate.



Meridian Avenue attracts bicyclists for several reasons, including it's beautiful, consistent tree canopy.



A short segment of Euclid Avenue now includes bicycle lanes, curb extensions/rain gardens, and enhanced crosswalks.



This single Bike Route sign at Park Avenue and 22nd Steet is confusing for users because the bike route apparently begins and ends in the same location.



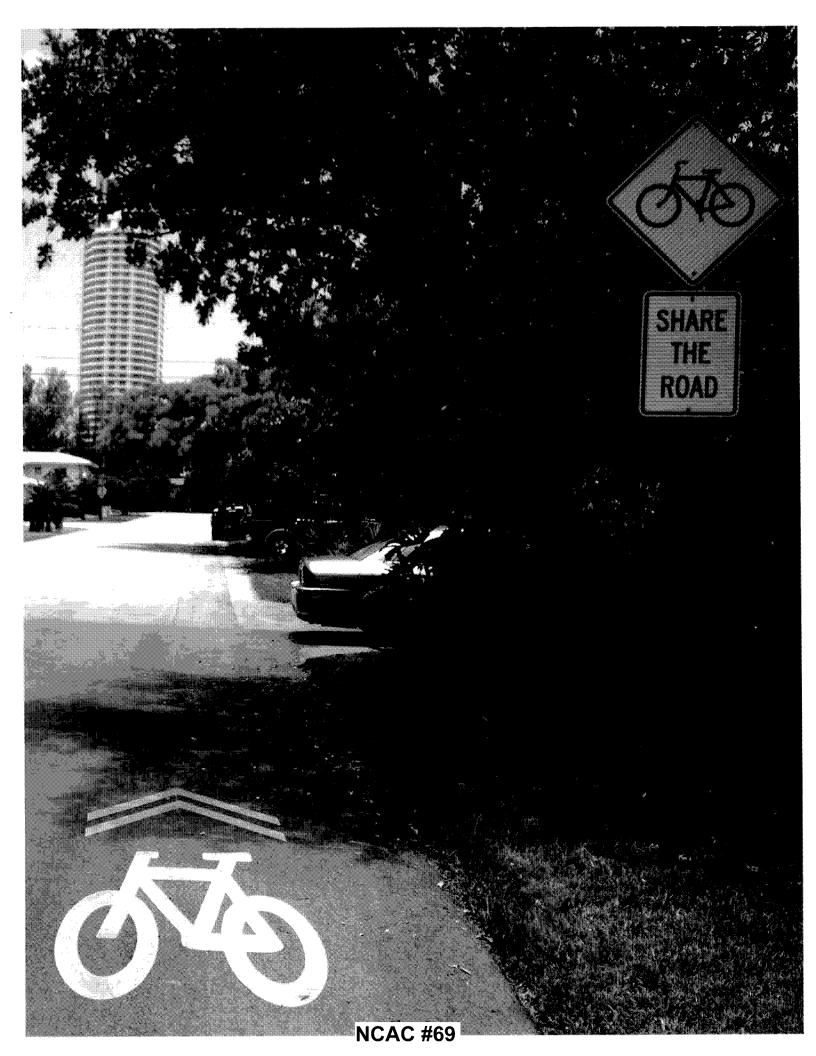
In select locations, such as the southeast corner of 13th and Washington, on-street bicycle parking could help meet demand and free limited sidewalk space for people walking.



The eastern terminus of the 16th Street bicycle lane directs bicyclists into a row of parked cars.



Bicycles are increasingly being used by businesses as an inexpensive, sustainable, and healthy way to deliver and market goods and services.





Mid Beach includes a dense residential and mixed-use urban fabric, as well as single-family neighborhoods. The neighborhood's various golf courses and canals interrupt the continuity of the street network, which does provide some mobility challenges for cyclists.

Image: Holiday-velvet.com

#### SUMMARY

The Mid Beach Handlebar Survey ride was conducted on June 7th - 9th, 2012 by The Street Plans Collaborative. The Survey included the June 9th Miami Beach Community Bicycle Ride, which attracted more than 50 participants.

The Handlebar Survey gathered qualitative and quantitative information regarding existing bicycling conditions. Information collected during the survey process includes, but is not limited to:

- · Current bicycle demand
- The level of comfort and perceived safety felt while bicycling a wide variety of streets
- · Existing street widths, types, and characteristics
- Bicycle network gaps
- · Presence of signalized intersections
- · Posted and actual vehicular speeds
- Land use characteristics
- Local and regional open space connections
- Public transportation options/bicycle integration

- Bicycle parking supply/demand
- · Bicycle parking type, location, and quality
- Bicycle trip generators
- · Existing bikeway infrastructure
- Interactions between all street users
- Safe/unsafe routes
- Wayfinding amenities

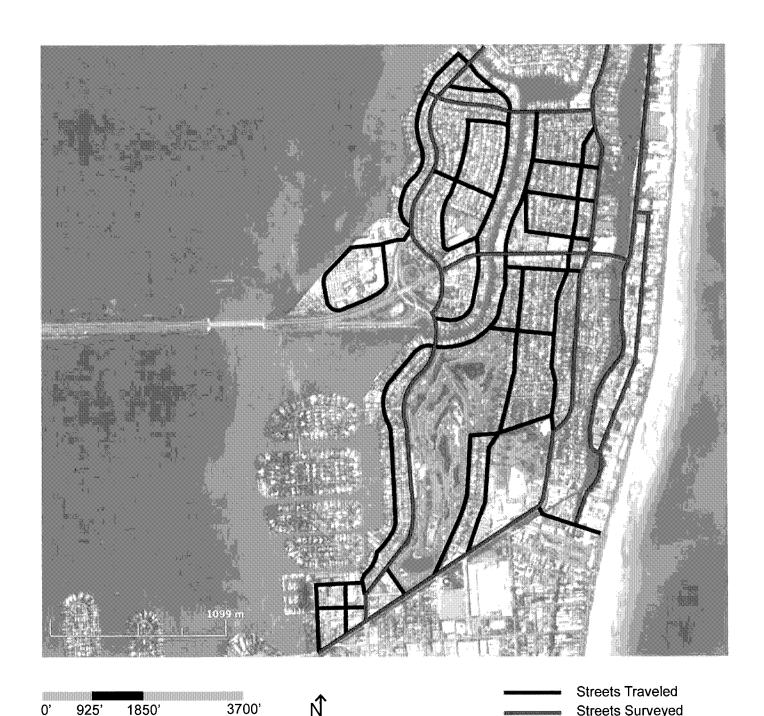
Handlebar Survey ride route maps, survey sheets, and a small collection of images representing various conditions found in the field are found herein. While a majority of the streets were covered in each neighborhood, only select "arterial" and "collector" streets went through the formal survey analysis process. Such thoroughfares typically contain land uses that generate the most bicycle trips, but are also known to be the most uncomfortable for bicycling. Based on the information collected, each of these streets are given an average "cycling experience" score. While not comprehensive, the Handlebar Survey certainly provides a representational snapshot of cycling in the neighborhoods of Mid Beach.

## The Landahar Survey

## - Mid Beach South -



## The Landebar Survey - Streets Surveyed -



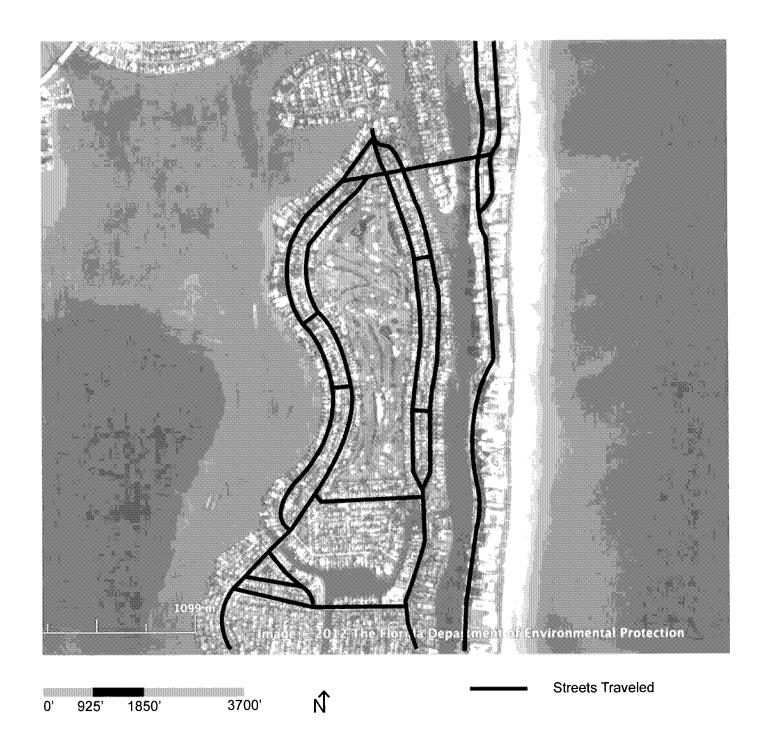
Streets Surveyed

3700'

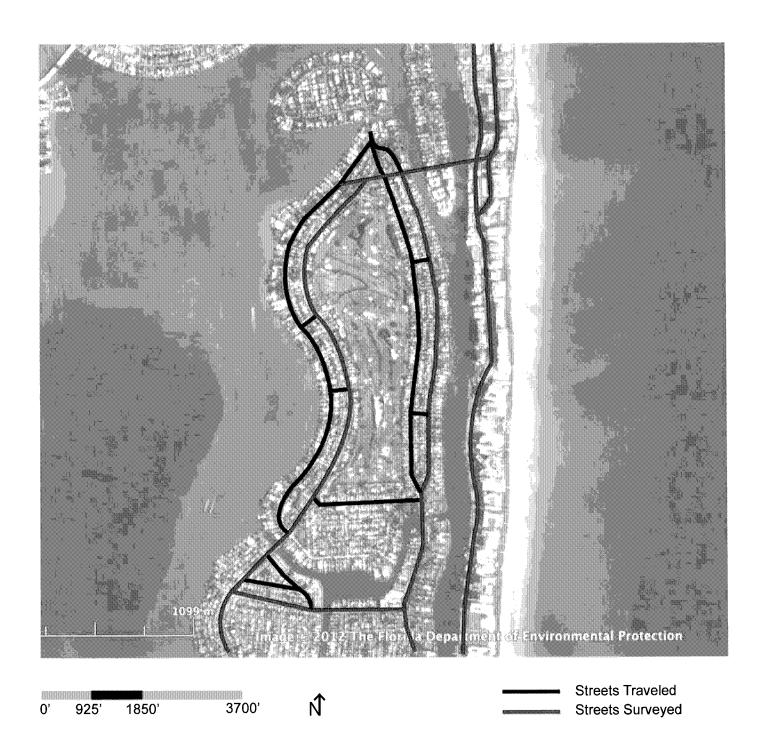
925'

1850'

## The Landebar Survey - Mid Beach North -



## The Landebar Survey - Streets Surveyed -



Existing Conditions	Yes	No	N/A	Alton Road / 63rd Street Notes
Survey limits: Dade Boulevard to Indian Creek Drive Jurisdiction: Florida Department of Transportation				
LAND USE				
Context: Urban		•		
Context: Suburban				
Commercial (retail, offices, etc.) uses		•		
Residential uses	•			
Industrial uses		•		
Vertical Mixed-use		•		
Horizontal Mixed-use		•	•	
Bicycle trip generator(s) (parks, paths, bike shop, etc.)		•		Mount Sinai, La Gorce Park
PUBLIC REALM		1	ş.	3
Are there continuous sidewalks?	•	•		Some interruptions, I-95
If yes, on both sides of the roadway?		•		One-side, south of I-95
Are the sidewalks an adequate width and condition?	•			Generally, as density is low
Are there street trees and/or attractive plantings?	•	٠		Varies
Do adjacent buildings form a consistent street wall?		•		Low density residential character
Are there many parking lots and/or driveway curb cuts?	•	•		Many due to residential character
Are there quality street furnishings and amenities?	•	•		Varies
Is there direct access to local/regional open space?	•			Two golf courses
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET				
Is on-street parking available?	•			Intermittently
Are there more than two lanes for through traffic?	•			
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			Center left, right-turn lanes
Is the speed limit posted consistently?	•	<b>†</b>		Design speed is higher
Is there vehicular congestion during peak travel hours?		<b>†</b>	<b>+</b>	Unable to observe
Are there curbs and gutters?	•	<b>+</b>		
Are there well-marked crosswalks at every intersection?		•		Many across intersecting streets
Is the pavement in a good state of repair?	•			For the most part
Are there consistent conflict points between modes?	•			Bus, cycling, walking difficult, RTOF
Is bus or rail transit available?	•			A few bus stops
If yes, does it adequately accommodate bicyclists?	•		_	bus bike racks
BICYCLE INFRASTRUCTURE				
Bicycle facilities (Sharrrows, lanes, paths etc.)?				Northbound, 21st to Chase Avenue
Dioyolo lacilities (Charrows, lancs, patris etc.):		•		None
	1			
Quality, accessible bicycle racks (U-racks,etc.)?	•			
	•			Alton Road @ 39th Street

## Alton Rd/63rd St. Cycling Experience

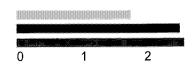


FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1_	2	3	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		Z	3	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:	•			
Notes: Alton Road is one of the two most uncomfortable corridors for cycling the whole city. Traffic volumes and speeds are high, I-95 provides a major disruption, and besides one northbound bicycle lane, between North Michigan Avenue, there are no bicycle facilities.	00000000000000000000000000000000000000			
2. The existing roadway conditions are amenable to cycling:	•	•		
Notes: The roadway is designed for fast motoring, not bicycling or walking.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•	
Notes: In general, yes. But it varied while cycling throughout the corridor. Several motorists came closer than 3 feet.		777////	***************************************	***************************************
4. The speed differential between myself and passing motorists was acceptable:		•		
Notes: The speed differential is generally uncomfortable, especially where there are no bicycle lanes, which is most of the corridor.				
5. I was able to locate high-quality bicycle parking easily:	•			
Notes: There is no bicycle parking available.				
6. There are numerous destinations along the corridor or in this area to which people could bicycle;	•			
Notes: Besides Mount Sinai Medical Center, and a few scattered civic or recreational amenities, the corridor is primarly comprised of low density single-family homes.		***************************************		
7. The area could become much more friendly to cyclists of all abilities:			•	1
Notes: While much can be done easily at the margins, this corridor will be more difficult to reclaim for modal balance than many others. This is based on traffic volumes, ROW limitations/jurisdiction, land use characteristics, and lack of destinations.		***************************************		

Street Score: 1.7

Average North Beach Street Score: 2.45

Average Miami Beach Score: 2.5



4

Existing Conditions &	Yes	No	N/Ā	Dade	Blvd. Notes
Survey limits: Pine Tree Drive to Purdy Avenue Jurisdiction: Miami-Dade County					
LAND USE					
Context: Urban	٠				
Context: Suburban	•		***************************************		
Commercial (retail, offices, etc.) uses	•				
Residential uses	•			Some upper l	evel apartments
Industrial uses		•		There are gas	s stations
Vertical Mixed-use		•			
Horizontal Mixed-use		•			
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Miami Beach	Senior High
PUBLIC REALM					
Are there continuous sidewalks?	•				
If yes, on both sides of the roadway?		•		path currently	in construction
Are the sidewalks an adequate width and condition?	•				
Are there street trees and/or attractive plantings?	•	•		Varies, mostl	y on private property
Do adjacent buildings form a consistent street wall?		•			
Are there many parking lots and/or driveway curb cuts?					
Are there quality street furnishings and amenities?		•			
Is there direct access to local/regional open space?		•		Eastern term	inus is Lummus Park
Are there plazas, pocket parks, playgrounds, etc.?	•			Holocaust Me	emorial
THE STREET					
Is on-street parking available?		•			
Are there more than two lanes for through traffic?	•				
If yes, are the rightmost travel lanes wider?		•			
Are there consistent signalized intersections?	•				
Are there consistent turning lanes?	•			Left Center T	urn Lanes, Right Turns
Is the speed limit posted consistently?	•				
Is there vehicular congestion during peak travel hours?		•		Was not obse	erved
Are there curbs and gutters?	•				
Are there well-marked crosswalks at every intersection?		•			
Is the pavement in a good state of repair?	•			Generally	
Are there consistent conflict points between modes?	•			Right turns o	n red, yield turn lanes
Is bus or rail transit available?	•			But only a fe	w bus stops
If yes, does it adequately accommodate bicyclists?	•			Bus racks	
BICYCLE INFRASTRUCTURE					
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•			Shared use	oath under construction
Quality, accessible bicycle racks (U-racks, etc.)?				•	
DecoBike Station(s)?	•			Dade Boulev	ard @ 19th Street
Consistent bicycle route/wayfinding signs?		•	<u> </u>	<u> </u>	
Intersection treatments (Bike boxes, priority signals)?		•		<u> </u>	

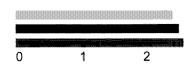
## Dade Blvd. Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1	2	2	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		۷	J	4
I felt visible, safe, and comfortable while cycling on this street/in this area:		•		
Notes: Visible, but not as comfortable as desired. Speeds are high.				***************************************
2. The existing roadway conditions are amenable to cycling:		•		
Notes: Site lines are good, but too many turning conflicts, especially at intersections where motorists have dedicated right turn lanes. Lack of bicycle facilities makes it more challenging. The new shared use path should help if intersection design challenges are resolved.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•	
Notes: With multiple lanes and relatively low traffic volumes, motorists are generally able to switch to the inside lane to give cyclists a wide berth, and they do for the most part.				
4. The speed differential between myself and passing motorists was acceptable:		•		
Notes: Unless there is congestion, motor vehicles tend to speed through this corridor, thereby diminishing the comfort of those who are walking or bicycling.				
5. I was able to locate high-quality bicycle parking easily:	•			
Notes: There is no visible bicycle parking available along the corridor.				
6. There are numerous destinations along the corridor or in this area to which people could bicycle:	***********	ļ	Ŀ	
Notes: There are a few key destinations, including the Publix grocery store and Miami Beach Senior High.		***************************************		
7. The area could become much more friendly to cyclists of all abilities:		ļ		•
Notes: Wayfinding and appropriate intersection treatments would go a long way to making Dade Boulevard an easier street to bicycle along. The new shared use path should help, but the intersections will need to be resolved, i.e. limiting right turns on red etc.		***************************************		

Street Score: 2.4

**Average North Beach Street Score: 2.45** Average Miami Beach Score: 2.5



3

Existing Conditions &	Yes	No	N/A	Pinetree Dr. Notes
Survey limits: Dade Boulevard to LaGorce Circle Jurisdiction: Miami-Dade County				aggegggggggggggggggggggggggggggggggggg
LAND USE		1	1,	
Context: Urban		•		
Context: Suburban				
Commercial (retail, offices, etc.) uses	***************************************	•		Except at 41st Street
Residential uses	•			Mostly residential
Industrial uses		•		
Vertical Mixed-use		•		
Horizontal Mixed-use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Rakow Youth Center, Pinetree Park
PUBLIC REALM		1	+	
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•	•		Varies
Are the sidewalks an adequate width and condition?	•			
Are there street trees and/or attractive plantings?	•			Throughout most of the corridor
Do adjacent buildings form a consistent street wall?	•	•		Varies
Are there many parking lots and/or driveway curb cuts?	•			Many driveways in residential areas
Are there quality street furnishings and amenities?	•	•		Varies
Is there direct access to local/regional open space?	•			Pinetree Park
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET		.1.		3
ls on-street parking available?	•	•		Intermittently in some sections
Are there more than two lanes for through traffic?	•			
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			At major cross streets
Are there consistent turning lanes?		•	-	
Is the speed limit posted consistently?		•		
Is there vehicular congestion during peak travel hours?		•		
Are there curbs and gutters?	•	•		Varies
Are there well-marked crosswalks at every intersection?		•		Many missing across Pine Tree
Is the pavement in a good state of repair?	•			
Are there consistent conflict points between modes?	•	-	***************************************	At high volume intersections
Is bus or rail transit available?	•			South of 26th, North of 46th
If yes, does it adequately accommodate bicyclists?	•			Bus racks
BICYCLE INFRASTRUCTURE	1			
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks, etc.)?		•		Wave rack in Pinetree Park
DecoBike Station(s)?		-	1	Pine Tree Drive @ 23rd
Consistent bicycle route/wayfinding signs?		•	-	
Intersection treatments (Bike boxes, priority signals)?	-	•		

## Pine Tree Dr. Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1	2	2	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		_	J	4
I felt visible, safe, and comfortable while cycling on this street/in this area:			•	
Notes: Traffic volumes are low enough during off-peak hours (most of the day) and speeds managed so that an intermediate to skilled cyclist can feel relatively comfortable cycling the corridor. The tree canopy and narrower lanes also help with creating a more comfortable environment for cycling.	***************************************		***************************************	
2. The existing roadway conditions are amenable to cycling:			•	
Notes: Pine Tree Drive has three character areas, generally found in the south, mid, and northern part of the corridor. Those areas with the planted tree medians make for an environment that is more amenable for cycling. Where the trees are sacrificed for more automobile accommodation (turn lanes and the like) the cycling amenities are greatly diminished. The northern portion of the corridor, from 51st to 63rd Street feature many traffic calming features (not all bicycle-friendly) and low volumes of traffic.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:				
Notes: Yes, although some vehicles cut it a bit too close, especially in those segments without the planted pine tree median .				mererenococcoccidis
4. The speed differential between myself and passing motorists was acceptable:			•	
Notes: Volumes were low enough so that most cars can pass cyclists by using the inside lane, however, speeds still seem elevated. Traffic speeds are more carefully managed between 51st and 63rd Streets.		**************************************		***************************************
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: Save for a "wave" rack in Pine Tree Park, there are no real bicycle parking facilities in the corridor. However, most of the corridor is low density, single-family residential and therefore does not require a lot of public bicycle parking.		777779999777777777777777777777777777777		
6. There are numerous destinations along the corridor or in this area to which people could bicycle:		•		
Notes: There are a few important destinations along the corridor, including Rakow Youth Center, 41st Street Corridor, and Pinetree Park.				
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Already preferred by cyclists (between 41st and 63rd), Pinetree Drive could become much more friendly to cyclists. Wayfinding and directional routing, pavement markings, intersection treatements, bicycle parking, and possible removal of travel lans could greatly benefit cyclists and pedestrians.				

Street Score: 2.7

Average North Beach Street Score: 2.45



Existing Conditions	Yes	No	N/A	Collins Ave./ Indian Creek Dr. Notes
Survey limits: 23rd Street to 63rd Street				
Jurisdiction: Florida Department of Transportation				
LAND USE				
Context: Urban				
Context: Suburban	<u> </u>	•		
Commercial (retail, offices, etc.) uses	•			Aportment and condo buildings
Residential uses	ļ			Apartment and condo buildings
Industrial uses Vertical Mixed-use	•	-		A few examples
Horizontal Mixed-use				A lew examples
Bicycle trip generator(s) (parks, paths, bike shop, etc.)				Few besides hotel jobs etc.
PUBLIC REALM		·		T ew besides floter jobs etc.
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•	•	<b>.</b>	Varies
Are there street trees and/or attractive plantings?	•	•		Varies
Do adjacent buildings form a consistent street wall?	•		-	Varies, some deep setbacks
Are there many parking lots and/or driveway curb cuts?				Too many curb cuts/hotel entrances
Are there quality street furnishings and amenities?	•			Varies
Is there direct access to local/regional open space?				Beach Walk accessible south of 46th
Are there plazas, pocket parks, playgrounds, etc.?				
THE STREET	_	_		Varios intermittent
Is on-street parking available?	•	•		Varies, intermittent
Are there more than two lanes for through traffic?	•	_		
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•		***	
Are there consistent turning lanes?	•			
Is the speed limit posted consistently?	•			Diddy
Is there vehicular congestion during peak travel hours?	•			Didn't observe any
Are there curbs and gutters?	•			Nicolary and action mobility
Are there well-marked crosswalks at every intersection?		•		Hinders pedestrian mobility
Is the pavement in a good state of repair?	•	-		DTOD to a large to the formula in a
Are there consistent conflict points between modes?	•			RTOR, turn lanes tough for walking
Is bus or rail transit available?	•			Bus
If yes, does it adequately accommodate bicyclists?	•	<u> </u>		Bus racks, but corridor is hostile
BICYCLE INFRASTRUCTURE				B1 1 1 2 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•			Bike Lanes, Indian Creek, 41st - 26th
Quality, accessible bicycle racks (U-racks, etc.)?		•		
DecoBike Station(s)?	·			Collins Avenue @ 24th, 31st, 35th, 40th, 43rd, 44th (coming soon), 46th, and 53rd.
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?		•		

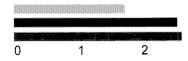
## Collins Ave. /Indian Creek Dr. Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :						
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree			<b>ာ</b>	4		
1. I felt visible, safe, and comfortable while cycling on this street/in this area:	•					
Notes: Traffic volume, number of moving lanes, motor vehicle speed, lack of bicycle facilities, and the number of curb cuts/driveways/turn lanes makes cycling very difficult along this corridor.			***************************************			
The existing roadway conditions are amenable to cycling:	•					
Notes: See above.						
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•			
Notes: Motorists seemed surprised to see a bicyclist on Collins and Indian Creek, so I found wide berth was given provided. The additional travel lanes/lack of congestion helped motorists switch lanes.	***************************************	***************************************				
4. The speed differential between myself and passing motorists was acceptable:	•					
Notes: Motorists and buses move consistently at elevated speeds throughout the corridor, which is intimidating for all but the most fearless bicyclist.						
5. I was able to locate high-quality bicycle parking easily:	•					
Notes: Bike parking along the corridor is practically non-existent. There may be some on the properties of hotels and condos, but those are for guests, not the general public.						
6. There are numerous destinations along the corridor or in this area to which people could bicycle:		•				
Notes: The corridor does include a few destinations, namely employment opportunities or to access the beach and Beach Walk. However, the Collins and Indian Creek corridors mostly serve as links between other places in the city where destinations are more closely clustered.						
7. The area could become much more friendly to cyclists of all abilities:			•			
Notes: Possibly, but large changes would have to take place. Bike parking, dedicated bicycle facilities, managing speeds, lowering traffic volumes and the like would be neccessary.						

Street Score: 1.7

Average North Beach Street Score: 2.45



Existing Conditions &	Yes	No	N/A	41st Street Notes
Survey limits: 41st Street Boardwalk to Alton Road Jurisdiction: Florida Department of Transportation				
LAND USE			J	
Context: Urban	•			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			Between Alton Rd. and Pinetree Dr.
Residential uses	•			Some
Industrial uses		•		
Vertical Mixed-use	•			
Horizontal Mixed-use	•			Small pocket at 16th/Lenox
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Retail, connection to Beach Walk
PUBLIC REALM	4	3	-	
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•			Constrained at times
Are there street trees and/or attractive plantings?	•			
Do adjacent buildings form a consistent street wall?	•			
Are there many parking lots and/or driveway curb cuts?		•		
Are there quality street furnishings and amenities?	•			
Is there direct access to local/regional open space?	•			Eastern terminus connects to beach
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET				
Is on-street parking available?	•			
Are there more than two lanes for through traffic?	•	<b> </b>		
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			
Is the speed limit posted consistently?		•		
Is there vehicular congestion during peak travel hours?	•			
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?	•		-	
Is the pavement in a good state of repair?	•	-		
Are there consistent conflict points between modes?	•			Many turning movements, buses
Is bus or rail transit available?	•			Bus
If yes, does it adequately accommodate bicyclists?	•			Bus racks
BICYCLE INFRASTRUCTURE				.1
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks, etc.)?	•		<b>†</b>	More streetside racks are needed
DecoBike Station(s)?	•		-	41st Street @ Chase Avenue
Consistent bicycle route/wayfinding signs?	-	•		Needed
Intersection treatments (Bike boxes, priority signals)?				Would be useful in select places

## 41st Street Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :	1_	2	2	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		2	၁	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:		٠		
Notes: High volumes of traffic reduce comfort, as do the lack of bicycle facilities, particularly at intersections.				
2. The existing roadway conditions are amenable to cycling:		•		
Notes: Motor vehicle turning movements at intersections present an occasional threat, as motorists do not often yield as they should. 5-lanes of sometime congested, moving/traffic diminishes the corridor's appeal to cyclists. Also, motorists pick up speed/maintain speed when moving east/west through the Alton Road Intersection, coming from or approaching the Julia Tuttle Causeway.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:		•		
Notes: High volumes of traffic and a constrained ROW limit the space motorists give to cyclists.				
4. The speed differential between myself and passing motorists was acceptable:			•	
Notes: This is more true east of the bridge between Meridian Avenue and Chase Avenue, where motorists generally slow down the further they travel from the Julia Tuttle.	***************************************	***************************************	***************************************	00000000000000000000000000000000000000
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: As a commercial corridor, more short-term bicycle parking should be made available. Numerous bikes were locked to street signs and posts, ultimately reducing the already limited capacity of the sidewalk.			WHAN WHO THE	**************************************
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: 41st Street is a hub of commercial/employment activity.			***************************************	
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: As a FDOT right-of-way, there are limitations to what can be done. However, turning conflicts could be managed, and the presence of cyclists made to be more visible at intersections. Adding more visible bicycle markings (sharrows), bike parking etc. would be a first step in supporting cycling along and across this important corridor.	***************************************	***************************************		-

Street Score: 2.6

**Average North Beach Street Score: 2.45** Average Miami Beach Score: 2.5 0 1 2

Existing Conditions &	Yes	No	N/A	47th Street Notes
Survey limits: Pinetree Drive to North Bay Road Jurisdiction: City of Miami Beach				
LAND USE	Ł			
Context: Urban	•			Commercial node at Pinetree Drive
Context: Suburban	•			
Commercial (retail, offices, etc.) uses	•			Limited to 1-block at Pinetree Drive
Residential uses	•			Single-family homes
Industrial uses		•		
Mixed-use	•			At Pinetree Drive
Horizontal Mixed use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Mount Sinai Medical Center
PUBLIC REALM		1		3
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?		•		Only south side east of Prairie
Are the sidewalks an adequate width and condition?	•			Low volumes of pedestrians
Are there street trees and/or attractive plantings?	•	***************************************		Lack of shade tree in public ROW
Do adjacent buildings form a consistent street wall?		•		
Are there many parking lots and/or driveway curb cuts?	•			Due to single family character
Are there quality street furnishings and amenities?		•		Varies
Is there direct access to local/regional open space?	•	<u> </u>		S. terminus at South Pointe Park
Are there plazas, pocket parks, playgrounds, etc.?		•	•	
THE STREET		1		i
Is on-street parking available?		•		Some parking occurs in the swales
Are there more than two lanes for through traffic?		•		
If yes, are the rightmost travel lanes wider?			•	
Are there consistent signalized intersections?		•		Alton and Pinetree only
Are there consistent turning lanes?		•		
Is the speed limit posted consistently?		•	•	
Is there vehicular congestion during peak travel hours?		•	•	
Are there curbs and gutters?		•	1	Only at bridge
Are there well-marked crosswalks at every intersection?	)	•		
Is the pavement in a good state of repair?	•		<b>+</b>	
Are there consistent conflict points between modes?		•	<b>1</b>	
Is bus or rail transit available?	•		+	Only at Alton, Michigan, Pinetree
If yes, does it adequately accommodate bicyclists?	•			Bus bike racks
BICYCLE INFRASTRUCTURE		J	1	. L'
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•			Conventional bike lanes
Quality, accessible bicycle racks (U-racks, etc.)?	<u> </u>	•	<b>†</b>	Needed at hospital, Pinetree retail
DecoBike Station(s)?		•		
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?	•	1	1	Peg-a-tracking across intersections

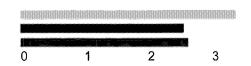
## 47th Street Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING:	1	2	2	1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		Z	ა -	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:				٠
Notes: Low traffic volumes, narrow lanes, low speeds, and bike lanes make cycling comfortable.	***************************************			
2. The existing roadway conditions are amenable to cycling:			•	
Notes: Pavement is in good condition. Number of driveways is something to be cautious about. Bike lane width varies as grass swale encroaches on the pavement. Skip lines through intersections (peg-a-tracking) make bike lane more visible and help guide lateral guidance for motorists and bicyclists.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing;				•
Notes: Low volume of traffic and bicycle lanes allow motorists to easily overtake cyclists.	***************************************			
4. The speed differential between myself and passing motorists was acceptable:				•
Notes: Yes.			***************************************	
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: Only two nodes really need bicycle parking: Mount Sinai Medical and the mixed-use neighborhood retail node at 47th and Pinetree. Neither location seemed to have accessible bicycle parking.		***************************************		
6. There are numerous destinations along the corridor or in this area to which people could bicycle:			•	
Notes: It's a short corridor, but the retail node and Mount Sinai are two distinct destinations.				
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: The addition of more bicycle parking and route wayfinding would help.			300000000000000000000000000000000000000	***************************************

Street Score: 3.3

Average North Beach Street Score: 2.45



Handlebar Survey Images - Mid Beach



On North Bay Road, which provides a north-south alternative to Alton Road, thick rubber speed humps leave gaps where cyclists may travel unimpeded.



This northbound only Alton Road bicycle lane terminates abruptly at Chase Avenue.



East-west and north-south bicycle lanes and shared use lane markings (sharrows, pictured above) are commonly found in the Nautilus neighborhood.



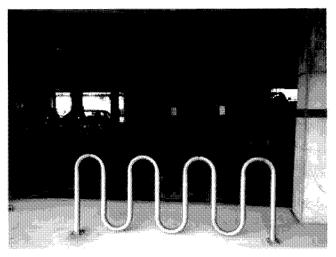
With low traffic volumes between 41st Street and 63rd Street, Pinetree Drive can be one of the more pleasant thoroughfares on which to ride a bicycle in Mid Beach.



Digital speed readout signs remind motorists when they are exceeding the speed limit along Alton Road.



Narrow sidewalks along the 41st Street leave little room for bicycle parking or other pedestrian-oriented amenities.



Unused bicycle parking at the main campus of the Mount Sinai Medical Center.



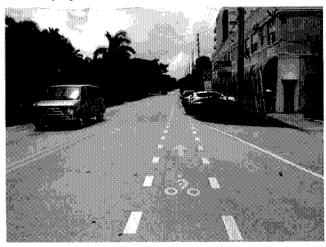
Looking east along a short residential street located between La Gorce and Pinetree Drive. Narrow residential streets like this provide a pleasant cycling environment.



Miami Beach Community Bicycle Ride participants take a lane along Alton Road.



Pinetree Drive in the La Gorce neighborhood features numerous traffic calming features and an ambiguous paved shoulder that is not marked as a bicycle lane due to its varying width.

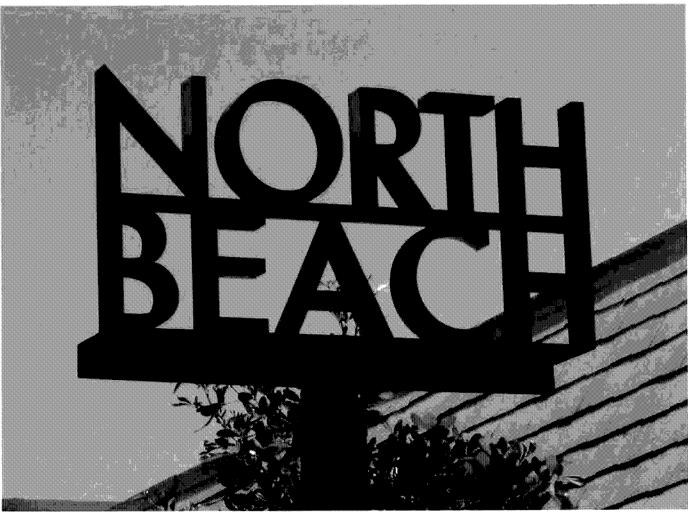


Along 47th Street, bicycle lanes of varying quality connect Pine Tree Drive with Alton Road



An old Bike Route sign along North Bay Road reminds users of the street's history as a preferred alternative to cycling Alton Road.





North Beach includes a mix of dense residential, mixed-use, and single-family neighborhoods connected by a network of streets of varying degrees of walkability.

#### **SUMMARY**

The North Beach Handlebar Survey ride was conducted on June 7th - 9th, 2012 by The Street Plans Collaborative. The Survey included the June 9th Miami Beach Community Bicycle Ride, which attracted more than 50 participants.

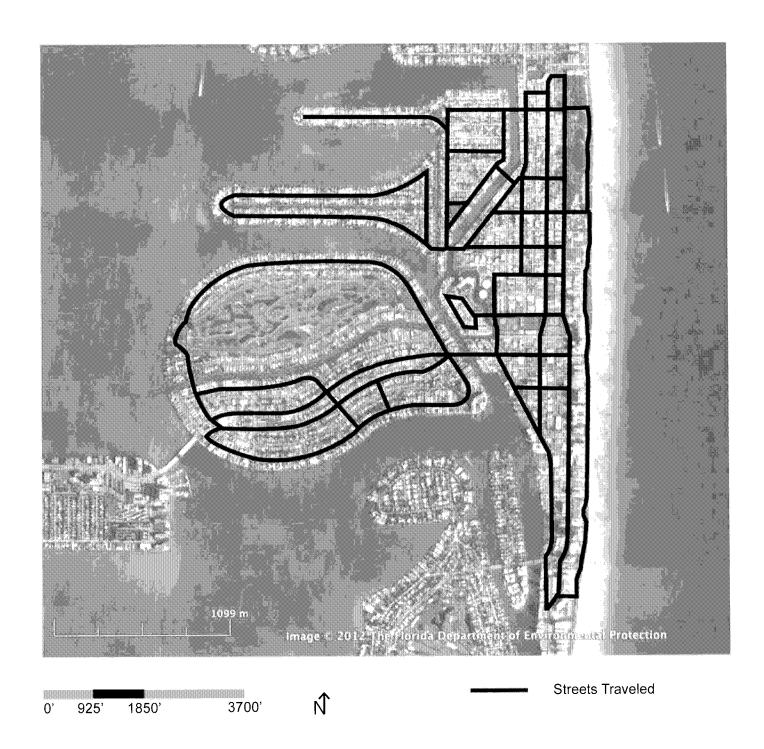
The Handlebar Survey gathered qualitative and quantitative information regarding existing bicycling conditions. Information collected during the survey process includes, but is not limited to:

- Current bicycle demand
- The level of comfort and perceived safety felt while bicycling a wide variety of streets
- Existing street widths, types, and characteristics
- · Bicycle network gaps
- Presence of signalized intersections
- Posted and actual vehicular speeds
- · Land use characteristics
- · Local and regional open space connections
- Public transportation options/bicycle integration

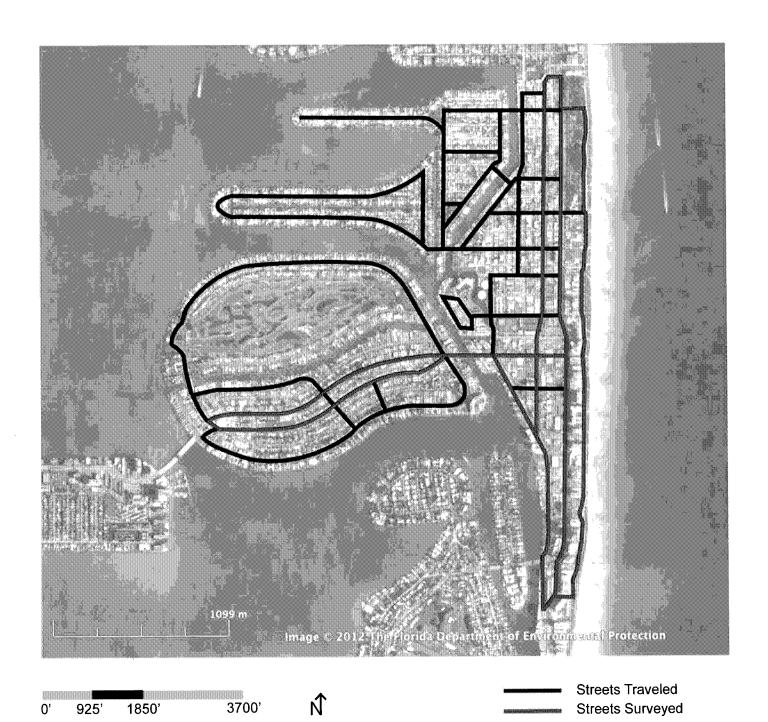
- · Bicycle parking supply/demand
- · Bicycle parking type, location, and quality
- Bicycle trip generators
- · Existing bikeway infrastructure
- · Interactions between all street users
- Safe/unsafe routes
- Wayfinding amenities

Handlebar Survey ride route maps, survey sheets, and a small collection of images representing various conditions found in the field are found herein. While a majority of the streets were covered in each neighborhood, only select "arterial" and "collector" streets went through the formal survey analysis process. Such thoroughfares typically contain land uses that generate the most bicycle trips, but are also known to be the most uncomfortable for bicycling. Based on the information collected, each of these streets are given an average "cycling experience" score. While not comprehensive, the Handlebar Survey certainly provides a representational snapshot of cycling in the neighborhoods of North Beach.

## The Landebar Survey - North Beach -



# The Land Char Survey - Streets Surveyed -



Existing Conditions 🙈	Yes	No	N/A	Beach Walk Notes
Survey limits: 63rd Street to 79th Street Jurisdiction: City of Miami Beach				1988年(17.1.1942)(20.100年)(1989年)(1984年)(1984年)(1984年)(1984年)(1984年)(1984年)(1984年)(1984年)(1984年)(1984年)(1984年)
LAND USE				
Context: Urban	:•.			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			
Residential uses	•			Condos and apartments
Industrial uses		•		
Vertical Mixed-use	•			
Horizontal Mixed-use		•		
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	٠			Beach Walk, Alison Park, North Shore Park
PUBLIC REALM		1		
Are there continuous sidewalks?			•	
If yes, on both sides of the roadway?			•	
Are the sidewalks an adequate width and condition?			•	The Beach Walk is in good shape.
Are there street trees and/or attractive plantings?	•			Varies along its trajectory
Do adjacent buildings form a consistent street wall?	•	•		Varies
Are there many parking lots and/or driveway curb cuts?		•		
Are there quality street furnishings and amenities?	•			
Is there direct access to local/regional open space?	•			Yes, the beach and two parks
Are there plazas, pocket parks, playgrounds, etc.?	•			
THE STREET			4	
ls on-street parking available?			•	
Are there more than two lanes for through traffic?			•	
If yes, are the rightmost travel lanes wider?			•	
Are there consistent signalized intersections?			•	
Are there consistent turning lanes?			•	
Is the speed limit posted consistently?			•	
Is there vehicular congestion during peak travel hours?	<u> </u>		•	
Are there curbs and gutters?				
Are there well-marked crosswalks at every intersection?				
Is the pavement in a good state of repair?	•	1		
Are there consistent conflict points between modes?	•	<b>†</b>		Occasionally, cyclists vs. peds
ls bus or rail transit available?	•			Bus, nearby
If yes, does it adequately accommodate bicyclists?	•			Bus racks
BICYCLE INFRASTRUCTURE	<u> </u>		3	
Bicycle facilities (Sharrrows, lanes, paths etc.)?			•	
Quality, accessible bicycle racks (U-racks, etc.)?	•	•		Varies
DecoBike Station(s)?		•		Nearby @ 64th, 76th, and 79th
Consistent bicycle route/wayfinding signs?		•	<u> </u>	
	1	£	§	4

### Beach Walk Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING:  1 = Disagree	1	2	3	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:				•
Notes: As a bicycle path, the Beach Walk is very comfortable for cycling.				
2. The existing roadway conditions are amenable to cycling:				•
Notes: Smooth surface and wide path make it easy to traverse by bicycle. However, at peak use there may be opportunities for conflicts between users.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			***************************************	•
Notes: No motorists present.	***************************************			
4. The speed differential between myself and passing motorists was acceptable:				•
Notes: No motorists.	***************************************			***************************************
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: Bicycle parking is actually quite scarce along and nearby the Beach Walk. There are 6 Deco-Bike stations within one block.		A STATE OF THE STA		
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: There are plenty of destinations along or nearby the Beach Walk, including the beach itself, and restaurants, parks etc. nearby.			***************************************	
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Wayfinding and additional bicycle parking would help.	***************************************		<u></u>	

Street Score: 3.6

Average North Beach Street Score: 2.3 Average Miami Beach Score: 2.5



Existing Conditions &	Yes	No	N/A	Collins Ave. Notes
Survey limits: 63rd Street to 87th Terrace Jurisdiction: Florida Department of Transportation				
LAND USE			3	
Context: Urban	•			Dense mix of land uses
Context: Suburban		٠		
Commercial (retail, offices, etc.) uses		•		Many hotels
Residential uses	•			Condos and apartments
Industrial uses		•		
Vertical Mixed-use	•	***************************************		Some
Horizontal Mixed-use		•		Commercial 1-story buildings
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Parks, Beach Walk access
PUBLIC REALM				
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•	•		Varies
Are there street trees and/or attractive plantings?	•	•		Varies
Do adjacent buildings form a consistent street wall?	•	•		Varies
Are there many parking lots and/or driveway curb cuts?	•			Yes, entrances to condos/hotels
Are there quality street furnishings and amenities?	*	•		Yes, where they fit on the sidewalk
Is there direct access to local/regional open space?	•			Alison Park, North Shore Park, North Shore Open Space Park
Are there plazas, pocket parks, playgrounds, etc.?		•		
THE STREET				
ls on-street parking available?	•	•		Varies
Are there more than two lanes for through traffic?	•			
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			Mostly left-turn lanes
Is the speed limit posted consistently?	•	<u> </u>	···	
Is there vehicular congestion during peak travel hours?	•	•		Did not observe
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?		•		Missing
Is the pavement in a good state of repair?	•			For the most part
Are there consistent conflict points between modes?	•	1		Bus stops are a challenge, left turn
Is bus or rail transit available?	•	+	<b> </b>	Bus
If yes, does it adequately accommodate bicyclists?		•	-	Buses have bike racks
BICYCLE INFRASTRUCTURE	-1			
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks,etc.)?	<b>†</b>	•		Some, not nearly enough
DecoBikeStation(s)?	•			Collins Avenue @ 64th, 67th, 69th, 76th, and 79th.
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?		•		

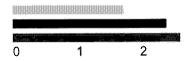
## Collins Avenue Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :  1 = Disagree	1	2	3	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:	•			
Notes: Traffic volume, number of moving lanes, motor vehicle speed, lack of bicycle facilities, and the number of curb cuts/driveways/turn lanes makes cycling very difficult along this corridor.				
2. The existing roadway conditions are amenable to cycling:	•			
Notes: No, they are not. See above.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			٠	
Notes: Motorists seemed surprised to see a bicyclist on Collins, so I found wide berth to be given more than expected.	-	***************************************		
4. The speed differential between myself and passing motorists was acceptable:	•			
Notes: Motorists and buses were moving at elevated speeds throughout the corridor, intimadating for all but the most fearless bicyclist. Additinally, crossing the corridor at unsignalized intersections is difficult due to speed and volume of passing motor vehicles.	***************************************		***************************************	**************************************
5. I was able to locate high-quality bicycle parking easily:	٠			
Notes: Bike parking along the corridor is difficult to find. There are a few more options between 75th and 71st.	***************************************			
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: There are many parks, restaurants, civic facilities, employment locations etc. that should be made more accessible by bicycle.				
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Large changes would have to take place in the roadway's design and configuration. Bicycle parking, dedicated bicycle facilities, managing speeds, lowering traffic volumes and the like would be neccessary.				

Street Score: 1.7

Average North Beach Street Score: 2.3



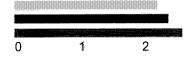
Existing Conditions	Yes	No	N/A	Harding Ave/ Abbot Ave. Notes
Survey limits: Indian Creek Drive to 87th Terrace Jurisdiction: Florida Department of Transportation				
LAND USE				
Context: Urban	•			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			
Residential uses	•			
Industrial uses		•		
Vertical Mixed-use	•			
Horizontal Mixed-use				
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•	***************************************		Retail, North Shore Park
PUBLIC REALM			•	1
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?		•		Too narrow in most places
Are there street trees and/or attractive plantings?	•	•		Varies, lack of shade trees
Do adjacent buildings form a consistent street wall?	•	•		Varies
Are there many parking lots and/or driveway curb cuts?	•			
Are there quality street furnishings and amenities?		•		
Is there direct access to local/regional open space?	•			North Shore Park
Are there plazas, pocket parks, playgrounds, etc.?	•	-		
THE STREET				
Is on-street parking available?				Intermittently
Are there more than two lanes for through traffic?	<b>.</b>		<u> </u>	
If yes, are the rightmost travel lanes wider?				
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?				
Is the speed limit posted consistently?				
Is there vehicular congestion during peak travel hours?	_	-		
Are there curbs and gutters?	•	_		Manusciani agracially corosa
Are there well-marked crosswalks at every intersection?	<b>†</b>	•		Many missing, especially across
Is the pavement in a good state of repair?	•			
Are there consistent conflict points between modes?		•	<u> </u>	Mostly been engineered out
Is bus or rail transit available?	•	***************************************		
If yes, does it adequately accommodate bicyclists?		•	<u> </u>	Bus racks
BICYCLE INFRASTRUCTURE				
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks, etc.)?		•		Very few racks
DecoBike Station(s)?		•		
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?		•:		

## Harding/Abbott Ave. Cycling Experience

FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING:  1 = Disagree		1					
1 = Disagree 2	= Somewhat Disagree	3 = Somewhat Agree	4 = Agree			-J	<b>-</b> +
ļ		g on this street/in this area;			•		
Notes: If traffic volume	s were higher it would be e	ven more uncomfortable.					
2. The existing roadwa	ay conditions are amenable	to cycling;		•			
Notes: The corridor is provisions for bicyclist		nany cars as possible north t	o south. There are no	WWW.			
3. Motorists, including	MDT bus drivers, consister	ntly gave me at least 3 ft. who	en passing:			•	
Notes: Mostly okay, al	though experienced a few v	vehicles cutting it a bit too clo	ose.	••••			
		sing motorists was acceptab	**************************************		•		
Notes: Three lanes of move too quickly, espe	one-way traffic makes wha ecially north of the commer	t should be a neighborhood scial district centered on 71st	street a racetrack, cars Street				***************************************
	high-quality bicycle parking			•			
	o bicycle parking to be four						***************************************
		rridor or in this area to which					
	ty of destinations along the ops clustered around the 7	corridor, including North Sho 1st Street corridor.	ore Park and all of its of-	***************************************			***************************************
7. The area could bec	ome much more friendly to	cyclists of all abilities:				•	
	anging the signal timing, re ould all improve conditions	emoving a lane, adding bicycl for cycling and walking.	le parking, slow motor				

Street Score: 2.15

Average North Beach Street Score: 2.3



Existing Conditions 🛦	Yes	No	N/A	71st Street Notes
Survey limits: Collins Avenue to 79th Street Causeway  Jurisdiction: Florida Department of Transportation				
LAND USE				
Context: Urban	•			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			
Residential uses	•			
Industrial uses		•		
Vertical Mixed-use	•			A few examples
Horizontal Mixed-use	•			
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			Retail, Normandy Isle Park
PUBLIC REALM				
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•	•		Varies
Are there street trees and/or attractive plantings?	•	•		Varies, need more shade trees
Do adjacent buildings form a consistent street wall?	•	•		Varies, in the commerical nodes
Are there many parking lots and/or driveway curb cuts?	•			Driveways in single-family section
Are there quality street furnishings and amenities?	•	•		Varies
Is there direct access to local/regional open space?				Beach/Beach Walk, Normandy Island Park
Are there plazas, pocket parks, playgrounds, etc.?	٠			
THE STREET				
Is on-street parking available?	•			
Are there more than two lanes for through traffic?	•			
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	•			
Is the speed limit posted consistently?	•			
Is there vehicular congestion during peak travel hours?	•	•	<u> </u>	Some observed
Are there curbs and gutters?				
Are there well-marked crosswalks at every intersection?				Hinders pedestrian mobility
Is the pavement in a good state of repair?	•	-	-	Recently repaved
Are there consistent conflict points between modes?	•		-	RTOR, particularly tough for walking
Is bus or rail transit available?	•			Bus
	•			Bus racks
If yes, does it adequately accommodate bicyclists?				Bus Idoks
BICYCLE INFRASTRUCTURE	_			Conventional bike lanes
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•			
Quality, accessible bicycle racks (U-racks, etc.)?		•		Racks exist, but not prevalent. 3 Deco Bike Stations
DecoBike Station(s)?	•	www.www.mannannannannannannannannannannannannann	***************************************	71st @ Byron Avenue (coming soon), Bay Drive (coming soon), Vichy Drive, Rue de Notre Dame, and Biarritz Drive (coming soon)
Consistent bicycle route/wayfinding signs?		•		
Intersection treatments (Bike boxes, priority signals)?				

## 71st Street Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :  1 = Disagree	1	2	3	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:			•	
Notes: Traffic volume, number of moving lanes, turning movements, parked cars and their doors, and motor vehicle speed make cycling a challeng along this corridor for some intermediate or beginner cyclists. However, the presence of bike lanes do help some intermediate and advanced bicyclists feel comfortable. Speeds are much lower in the more urban, commercial heart of North Beach.				
2. The existing roadway conditions are amenable to cycling:		•		
Notes: They are mostly amenable to motoring quickly - three lanes of one-way traffic with few traffic calming measures in place.	<b>6</b>	WANTA TO THE TOTAL		
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•	
Notes: Motorists seemed to generally respect the bicycle lane and gave enough space while overtaking cyclists.				
4. The speed differential between myself and passing motorists was acceptable:		•		
Notes: The speeds are high, especially in the western half of the corridor, which is intimidating for most intermediate and novice cyclists.				
5. I was able to locate high-quality bicycle parking easily:		•		
Notes: Bike parking is undersupplied along the corridor, even in the core of the village.				
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: The corridor includes three nodes of commercial, recreational, and civic destinations.	***************************************		WOODOOTOO TO T	**************************************
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Adding more wayfinding, bike parking, intersection treatments, managing speeds, lowering traffic volumes and the like would be beneficial.	***************************************			

Street Score: 2.45

**Average North Beach Street Score: 2.3** 



Existing Conditions 🚲	Yes	No	N/A	Normandy Dr Notes
Survey limits: Bay Drive to 79th Street Causeway  Jurisdiction: Florida Department of Transportation				
LAND USE				
Context: Urban	•			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			
Residential uses	•			
Industrial uses		•		
Vertical Mixed-use	•			A few examples
Horizontal Mixed-use	•			
Bicycle trip generator(s) (parks, paths, bike shop, etc.)				Retail, Normandy Isle Park
PUBLIC REALM	,			3
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?	•	•		Varies, better in village core
Are there street trees and/or attractive plantings?	•	•		Varies, need more shade trees
Do adjacent buildings form a consistent street wall?		•		Varies, in the commerical nodes
Are there many parking lots and/or driveway curb cuts?	•			Driveways in single-family section
Are there quality street furnishings and amenities?	•	•		Varies
Is there direct access to local/regional open space?	•			Normandy Island Park
Are there plazas, pocket parks, playgrounds, etc.?	•			At Normandy Island Park
THE STREET	-			
Is on-street parking available?	•			
Are there more than two lanes for through traffic?	•			
If yes, are the rightmost travel lanes wider?	-	•		
Are there consistent signalized intersections?	•			
Are there consistent turning lanes?	<b>-</b>			
Is the speed limit posted consistently?	•	<u> </u>		
Is there vehicular congestion during peak travel hours?	•	-		Some observed
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?		•		Hinders pedestrian mobility
Is the pavement in a good state of repair?	•			Recently repaved
Are there consistent conflict points between modes?	•		•	Particularly tough for walking
Is bus or rail transit available?	•		<b>†</b>	Bus
If yes, does it adequately accommodate bicyclists?	•			Bus racks
BICYCLE INFRASTRUCTURE				
Bicycle facilities (Sharrrows, lanes, paths etc.)?	•			Conventional bike lanes
Quality, accessible bicycle racks (U-racks, etc.)?	-	•		Racks exist, but not prevalent.
DecoBike Station(s)?	*			Normandy Drive @ Trouville Espla
Consistent bicycle route/wayfinding signs?	-	•		
Intersection treatments (Bike boxes, priority signals)?		•		

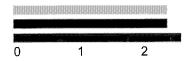
## Normandy Dr Cycling Experience



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING :				1
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		4	J	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:			•	
Notes: Traffic volume, number of moving lanes, turning movements, parked cars and their doors, and motor vehicle speed make cycling a challeng along this corridor for some intermediate or beginner cyclists. However, the presence of bike lanes do help some intermediate and advanced bicyclists feel comfortable. Speeds are much lower in the more urban, Normandy Village core.				
2. The existing roadway conditions are amenable to cycling:		•		
Notes: They are mostly amenable to motoring quickly - three lanes of one-way traffic with few traffic calming measures in place. People driving treat Normandy Drive as a speedway to the JFK Causeway.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:			•	
Notes: Motorists seemed to generally respect the bicycle lane and gave enough space while overtaking cyclists.	***************************************		***************************************	
4. The speed differential between myself and passing motorists was acceptable:		•		
Notes: The speeds are high, especially approaching the last few blocks before the Causeway, which is intimidating for most intermediate and novice cyclists.		***************************************		
5. I was able to locate high-quality bicycle parking easily:	•			
Notes: Bike parking is quite spotty along the corridor, even in the core of the village.				
6. There are numerous destinations along the corridor or in this area to which people could bicycle:				•
Notes: The corridor two nodes of commercial, recreational, and civic destinations.	V	***************************************	***************************************	
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: Adding more wayfinding, bike parking, intersection treatments, managing speeds, lowering traffic volumes and the like would be beneficial. Additionally, the westbound bike lane just ends, with no indication of where a cyclist should position themselves, or turn for other north-south facilities.	***		***************************************	NATION AND ADDRESS OF THE PROPERTY OF THE PROP

Street Score: 2.3

Average North Beach Street Score: 2.3 Average Miami Beach Score: 2.5



Existing Conditions	Yes	No	N/A	Indian Creek Dr. Notes
Survey limits: Collins Avenue to 71st Street  Jurisdiction: Florida Department of Transportation				
LAND USE				
Context: Urban	•			
Context: Suburban		•		
Commercial (retail, offices, etc.) uses	•			Mostly near 71st Street
Residential uses	•	••••••		Dense condos and apartments
Industrial uses		•		
Vertical Mixed-use	•			Some
Horizontal Mixed-use				Some, near 71st Street
Bicycle trip generator(s) (parks, paths, bike shop, etc.)	•			71st Street node, Brittany Bay Park
PUBLIC REALM			1	
Are there continuous sidewalks?	•			
If yes, on both sides of the roadway?	•			
Are the sidewalks an adequate width and condition?		•		Sidewalks are constrained
Are there street trees and/or attractive plantings?	•	•		Inconsistent
Do adjacent buildings form a consistent street wall?	•	•		Varies
Are there many parking lots and/or driveway curb cuts?	•	•		Some
Are there quality street furnishings and amenities?	•	•	***************************************	Varies
Is there direct access to local/regional open space?	•			Brittany Bay Park
Are there plazas, pocket parks, playgrounds, etc.?	•	•		
THE STREET		I		
Is on-street parking available?		•		In just a few select places near 71s
Are there more than two lanes for through traffic?	•	•		
If yes, are the rightmost travel lanes wider?		•		
Are there consistent signalized intersections?	•	<b></b>		
Are there consistent turning lanes?	•		<b>+</b>	Double turn lanes exist
Is the speed limit posted consistently?				
Is there vehicular congestion during peak travel hours?	•			Observed some
Are there curbs and gutters?	•			
Are there well-marked crosswalks at every intersection?		•		Makes crossing the street difficult
Is the pavement in a good state of repair?	•		<u> </u>	
Are there consistent conflict points between modes?	•		www	Turn lanes/turning movements
Is bus or rail transit available?	•			Yes
If yes, does it adequately accommodate bicyclists?	•		1	Bus racks
BICYCLE INFRASTRUCTURE		-	.I	1
Bicycle facilities (Sharrrows, lanes, paths etc.)?		•		
Quality, accessible bicycle racks (U-racks, etc.)?	<b>_</b>	•		
DecoBike Station(s)?				
Consistent bicycle route/wayfinding signs?		•		Needed
Intersection treatments (Bike boxes, priority signals)?				Would be useful in select places

## Indian Creek Drive Cycling Experience &



FOLLOWING YOUR RIDE, PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING:				
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree		2	J	4
1. I felt visible, safe, and comfortable while cycling on this street/in this area:	•			
Notes: Motor vehicle speeds, volume, turning movements, bus stop bays, multiple lanes and turn lanes, and one-way direction of traffic makes cycling very uncomfortable along this corridor.			***************************************	
2. The existing roadway conditions are amenable to cycling:	•			
Notes: Despite connecting a lot of important destinations, the lack of bicycle facilities and previously mentiond challenges results in an Indian Creek Corridor that does not offer amenable cycling conditions.				
3. Motorists, including MDT bus drivers, consistently gave me at least 3 ft. when passing:	•			
Notes: Motorists mostly came very close, the only relief was using the bus stop bays when buses were not present.	MAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	76000000777777777777777777777777777777		
4. The speed differential between myself and passing motorists was acceptable:	•			
Notes: Speeds are too high for most people walking or bicycling to feel comfortable.		WWWWWTT7777777777777777777777777777777	***************************************	
5. I was able to locate high-quality bicycle parking easily:	•			
Notes: None along the residential portion of the corridor; some at the commercial nodes at Washington and Alton Road.	***************************************		***************************************	
6. There are numerous destinations along the corridor or in this area to which people could bicycle:			•	
Notes: The 71st Street commercial node and surrounding area is an important destination. South of 71st the land use is pretty generic with dense residential condo and apartment buildings. Yet, the corridor provides a major connection to destinations located at all points south.			***************************************	***************************************
7. The area could become much more friendly to cyclists of all abilities:			•	
Notes: For this corridor to be amenable to cycling the entire street would have to be rethought, redesigned, and rebuilt. Short of that, it won't get that much better in the near term.				

Street Score: 1.6

Average North Beach Street Score: 2.3 Average Miami Beach Score: 2.5



#### Handlebar Survey Images - North Beach



Looking south along Collins Avenue, just north of 63rd Street. High volumes of fast-moving traffic, along with a lack of facilities make bicycling and walking a challenge.



The Beach Walk provides a great recreational and transportation amenity, especially those looking for an alternative to Collins Avenue.



Bicycle parking located along the east Ocean Terrace sidewalk.



The paved portion of the Beach Walk currently terminates at 79th Street, approximately .5 miles from the city's northern border.



A DecoBike user fights rain and traffic in an attempt to cross Collins Avenue.



A western looking view of 85th Street, which terminates at Stillwater Park.



Connecting Stillwater Park and Crespi Park, Hawthorne is a good candidate for a bicycle facility.



Bicycle parking at Crespi Park.



The re-paving of 71st Street included the addition of bicycle lanes.
Image: Miami Bike Scene



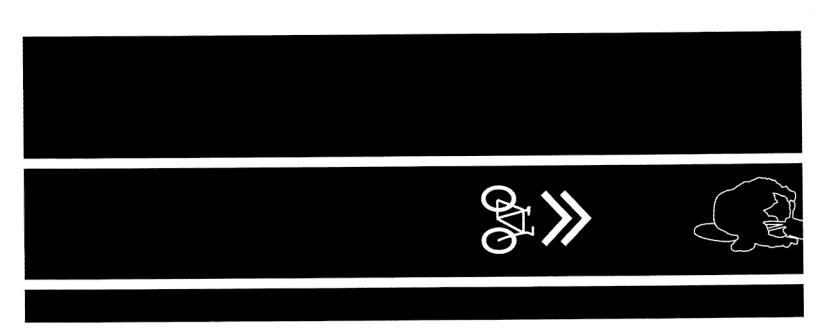
A father and daughter enjoy the Miami Beach Community Ride. As a police escorted ride, dangerous thoroughfares like Collins Avenue temporarily feel safe for cyclists of all abilities.



Miami Beach Community Ride participants enjoy a police escort south along Indian Creek Drive.



North Bay Road provides an important alternative to the congestion and fast-moving cars found moving along Alton Road.



#### Neighborhood/Community Affairs Committee and Land Use Development Committee Meeting March 19, 2013

DISCUSSION REGARDING STATUS OF BEACH WALK FROM SUNRISE PLAZA TO  $\mathbf{4}^{\text{TH}}$  STREET.

STATUS UPDATE FOR THE BEACH WALK FROM SUNRISE PLAZA TO FIFTH STREET

**ITEM #4** 



#### COMMITTEE MEMORANDUM

TO: Neighborhoods and Community Affairs and Land Use and Development Committees

FROM: Kathie G. Brooks, Interim City Manager

DATE: March 19, 2013

SUBJECT: DISCUSSION ON THE BEACHWALK PROJECT FROM SUNRISE PLAZA TO 4TH

STREET

STATUS UPDATE FOR THE BEACHWALK FROM SUNRISE PLAZA TO FIFTH STREET

At the January 16, 2012 Commission Meeting, Commissioner Tobin referred a discussion of the Beachwalk project from Sunrise Plaza to 4<sup>th</sup> Street to the Neighborhood Community Affairs Committee (NCAC). At the March 13, 2013 Commission meeting, Commissioner Gongora referred a discussion of the Beachwalk project from Sunrise Plaza to 5<sup>th</sup> Street to the Land Use and Development Committee (LUDC). The Administration placed these two items on the joint meeting of the NCAC and LUDC to provide an update to the status of the Beachwalk II Project from South Pointe Drive/Sunrise Plaza to 5<sup>th</sup> Street.

#### **BACKGROUND**

The Beachwalk II Project consists of an on-grade paver pathway from South Pointe Drive to 5<sup>th</sup> Street west of the dune system in the existing sand spoil area. This project is another link in the City's Atlantic Greenway Network, which establishes a multipurpose public access corridor that interconnects area business districts, cultural and tourism centers, residential neighborhoods, parks, schools and the beaches.

This segment addresses the final gap in the beachside paths in the south beach neighborhood. The design is similar to the pathway located between 14<sup>th</sup> Street and 23<sup>rd</sup> Street with an ADA-compliant pathway that accommodates a variety of users including bicyclists, roller bladders, walkers, and joggers. A major component of this project is coastal dune enhancement, which will include the removal of non-native vegetation, planting of native dune vegetation, and the installation of protective rope and post around the dunes. The lighting throughout the Beachwalk II will be specially designed bollards with amber LED lights to minimize the impact on nesting sea turtles and their hatchlings that can become disoriented by artificial lighting.

#### **ANALYSIS**

This project will connect South Pointe Park to the existing serpentine promenade in Lummus Park at 5<sup>th</sup> Street. In order to expedite the coastal construction control line permitting process, the City split the project into two phases: Phase I (South Pointe Drive to 3<sup>rd</sup> Street) and Phase II (3<sup>rd</sup> Street to 5<sup>th</sup> Street).

The City has obtained the easements from the adjacent upland properties and the permits for

NCAC/LUDC – Beachwalk II March 19, 2013 Page 2 of 2

construction of Phase I. This phase is estimated to cost \$2,200,000 and is fully funded by the City. Construction for Phase I will be going out to bid this month, and construction is anticipated to begin in July 2013. Construction is estimated to be complete by December 2013.

On September 6, 2012, the City again met with the upland properties between 3<sup>rd</sup> Street and 5<sup>th</sup> Streets to discuss the easements needed to place the proposed beachwalk in the existing sand spoil area west of the dune. At this meeting, several residents stated that their condominium documents require a majority of residents to vote to approve providing an easement to the City, which is very difficult for condominium associations to obtain.

The Presidential Building at 401 Ocean Drive has recently expressed interest in granting an easement and a meeting is being scheduled with the property owners to address it. Similarly, a board member at 345 Ocean has discussed this potential easement with the board of directors at 401 Ocean Drive.

Florida Department of Environmental Protection (FDEP) regulations require the Project to be located as far landward as practicable on the landward side/slope of the dune. Florida Administrative Code requires minimization of impacts to the beach-dune system, including potential debris impacts and affects on marine turtles and their nesting habitat. On a parallel path, the City is investigating re-locating the Beachwalk east of the Erosion Control Line taking it outside of any private area and thus eliminating the need for any future easements. It is not known at this time, if approvals would be granted by the State for this option.

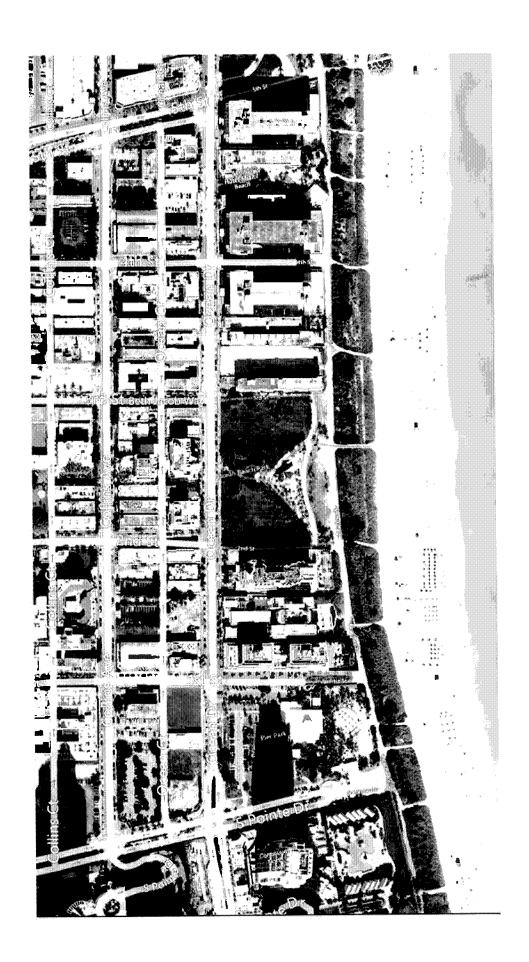
At the February 6, 2013 Commission meeting, a motion was made to give the Administration direction that future segments of the beachwalk should be elevated in order to provide an ocean view. The motion was approved by acclamation. The design of Phase I was completed prior to this directive, consequently, Phase I does not provide an ocean view as the top of the dune is approximately 5 – 7 feet higher than the proposed path and has significant landscaping. Should it be decided that ocean views are required on this section of Beachwalk, the project would need to be re-designed and re-permitted. At this time, it is not certain that FDEP would grant a permit for this revision. The redesign and permitting effort would take approximately 18 months.

#### CONCLUSION

The above information is provided for discussion by members of the Neighborhoods and Community Affairs and Land Use and Development Committees.

igg/JJF/RWS/ESW

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OFFICE OF THE MAYOR AND COMMISSION

#### MEMORANDUM

TO:

Kathie Brooks, Interim City Manager

FROM:

Ed Tobin, Commissioner

DATE:

January 14, 2013

SUBJECT:

Agenda item for January 16, 2013 City Commission Meeting

Please place on the January 16<sup>th</sup> City Commission Meeting a referral to Neighborhood/ Community Affairs Committee to discuss status of beach walk from Sunrise Plaza to 4th Street.

If you have any questions please contact, Dessiree Kane at Extension 6274

ET/dk

**Date** 

We are committed to providing excellent public service and safety to all who live, work, and play in our vil. Agenda Item



#### OFFICE OF THE MAYOR AND COMMISSION

#### MEMORANDUM

TO:

Kathie Brooks, Interim City Mana

FROM:

Michael Góngora, Commissioner

DATE:

March 4, 2013

SUBJECT: Referral Item for March Commission Meeting

Please place on the March Commission consent agenda a referral to Land Use Committee to discuss status update for the beach walk from Sunrise Plaza to Fifth Street. If you have any questions please feel free to contact my aide Diana Fontani at ext 6087.

MG/df

Agenda Item <u>CYK</u> Date <u>3-/3-/3</u>